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SEVENTEENTH ANNUAL REPORT
OF THE
STATE BOARD OF INSANITY

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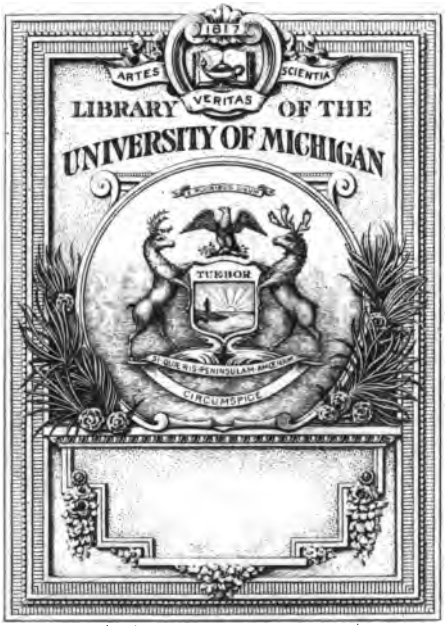

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SEVENTEENTH ANNUAL REPORT

OF THE

STATE BOARD OF INSANITY

OF

The Commonwealth of Massachusetts

FOR THE

YEAR ENDING NOVEMBER 30, 1915.

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MEMBERS OF THE STATE BOARD OF INSANITY.

Nov. 30, 1915.

MICHAEL J. O'MEARA, M.D., *Chairman*, ... WORCESTER.
L. VERNON BRIGGS, M.D., *Secretary*, ... BOSTON.
CHAS. E. WARD, *Treasurer*, ... BUCKLAND.

OFFICERS.

LOWELL F. WENTWORTH, M.D.,
Deputy Executive Officer.

NELLIE F. BALL, *First Clerk.*
FLORENCE H. McINTIRE, *Stenographer.*
EDA W. FITCH, *Clerk.*
CLARA L. FITCH, *Stenographer.*
M. LOUISE SMALL, *Clerk.*
REBECCA F. WARSHAW, *Clerk.*
LILLIAN H. SINCLAIR, *Stenographer.*

ELMER E. SOUTHARD, M.D., *Pathologist.*
MYRTELLE M. CANAVAN, M.D., *Assistant Pathologist.*
HARRY C. SOLOMON, M.D., *Investigator of Brain Syphilis.*
LILLIAN D. RIDER, *Stenographer.*
ELLEN R. SCOTT, *Technician.*

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BENJAMIN F. WARD, *Visitor.*
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MARY L. BALLOU, *Clerk.*

MABEL G. GRAGG, *Visitor.*
Department of Family Care.

FRED F. FLANDERS, Ph.D., *Chemist.*
Department of Standards.

EMILY L. HAINES, *Supervisor of Industries.*

Transportation Agents.
FRED A. HEWEY.
ELIZABETH C. DEVINE.

JOSEPH P. MADDEN,
Laboratory Assistant and Messenger.

The Commonwealth of Massachusetts.

STATE HOUSE, BOSTON, March 27, 1916.

To His Excellency the Governor and the Honorable Council.

The undersigned, members of the State Board of Insanity, respectfully submit the seventeenth annual report of the Board for the year ending Nov. 30, 1915. The matters, however, relating to general statistics cover the year ending September 30.

MICHAEL J. O'MEARA.
L. VERNON BRIGGS.
CHARLES E. WARD.

The Commonwealth of Massachusetts.

REPORT OF THE STATE BOARD OF INSANITY.

DUTIES OF THE BOARD.

The State Board of Insanity was reorganized in August, 1914, in accordance with chapter 762 of the Acts of 1914, a paid Board of three members replacing an unpaid Board of five members with an executive head.

This act has increased the powers of the Board, it now having in addition to supervision the elements of control. Section 2 provides that the Board shall have charge of all insane, feeble-minded and epileptic persons and persons addicted to the intemperate use of narcotics or stimulants, the care of whom is vested in the Commonwealth by law.

The Board has the right to investigate the question of status or condition of any person in any of its institutions, and to discharge any person if, in its opinion, he is not insane, or can be cared for without danger to others and with benefit to himself.

Matters of transfer and distribution of patients, deportation of patients to other States and countries, claims to support as State charges in institutions, etc., are all under the immediate direction of the Board.

Work of construction under special appropriations for new buildings, unusual repairs, etc., is under control of the Board, and also the expenditure of money for such purposes. The Board is required to prepare plans for buildings, and also to select land to be taken by the Commonwealth for the purposes of any new, or for the extension of existing, institutions.

The laws regarding the insane will be found in chapter 504 of the Acts of 1909, chapter 762 of the Acts of 1914, and chapter 241 of the General Acts of 1915. A copy of chapter 241 will be found on page 19.

ACTIVITIES OF THE BOARD.

In August, 1914, the Board published its first Bulletin, and up to Nov. 30, 1915, 16 such Bulletins have been issued.

The Board recommended to the Legislature of 1915 a change in the character of the Worcester State Asylum, converting the asylum into an admitting hospital for the insane, and recommended also a change of name to the Grafton State Hospital.

It also recommended making the Foxborough State Hospital an admitting hospital.

The Board's recommendations were favorably acted upon by the Legislature, and both of these institutions are now admitting hospitals for the care of the insane. The Board feels it has taken a step in advance in bringing about these changes.

The asylums were created with the idea of caring for chronic cases more economically than they could be cared for in hospitals, where hospital organization, a large and more extensive staff, laboratory facilities, etc., are demanded. This, no doubt, might have been successfully carried out if the class of patients for the asylums had been selected with this alone in mind. As it happened, the hospitals retained their own best workers and quieter cases for their own colonies. Second-best patients in the hospitals were selected for the colony at Gardner. This left a less desirable class to be transferred to the asylums. In consequence, there was aggregated an accumulation at the asylums of infirm, tubercular and custodial patients of the demented type who were unable to work, which necessarily increased the number of attendants and added in other ways to the per capita cost, so that the asylums, when they were abolished, had almost approached the per capita cost of the hospitals. It was evident that the reason assigned for creating them did not sustain itself.

It is apparent to patients that hope is left behind when they enter; and Dr. Edward French, superintendent of the Medfield State Hospital, says that in several cases he has traced attempts at suicide to this idea. Friends also lose hope, and take less interest in the patients after they have been pronounced incurable, or practically so, and transferred to an asylum.

Another reason which Dr. French believes also operates to lessen the interest and energy of the staff in an asylum is that the patients are chronic cases and regarded as purely custodial, and the staff loses a certain stimulation which tends to professional acuteness. This operates also to lessen the activities of nurses and attendants.

It has also been found difficult to hire assistants for asylums. Assistants do not care to accept positions for the care of chronic patients. They naturally want to treat more hopeful cases.

The general air and atmosphere in wards of an asylum as such is less stimulating and hopeful than in a hospital. The accumulation of disheveled, untidy patients is marked, and there is a lack of optimism which should be present in every public institution.

In accordance with a policy of the Board, each institution was requested to care for the boarded-out patients in its district, such patients having formerly been cared for under the supervision of the State Board of Insanity; and accordingly, on Jan. 1, 1915, 178 patients were removed from family care under the State Board to family care under the trustees of the various institutions.

This has stimulated the interest of the different hospitals in developing the boarding-out, or family-care, problem. At the close of the statistical year there were 317 patients in family care under the direction of the trustees, in addition to 86 still under the care of the State Board.

The Board voted that the epileptics in the State hospitals for the insane be transferred to Monson State Hospital and Grafton State Hospital, in accordance with a policy of the Board, for the better classification of patients under its charge.

Up to Nov. 30, 1915, 123 epileptics were transferred to the Grafton State Hospital and 34 to the Monson State Hospital.

In further adopting a policy in regard to classification it was voted to remove from the State hospitals to the Foxborough Hospital a grouping of about 60 defective delinquents as soon as the wards at Foxborough are made available.

In connection with the duties of the Board, whereby they shall establish by-laws and regulations for the government of

the State hospitals, it was voted in June that, in addition to regulations already established by the Board, there shall be in the training schools for nurses obligatory courses in occupations and industries.

The Legislature of 1915 appropriated $15,000 for the preparation of plans, etc., for a hospital for the mentally ill in the metropolitan district. This was used in connection with an unexpended balance of over $30,000 from the appropriation of $100,000 which was made by the Legislature of 1914 for the purchase of land for the proposed hospital in the metropolitan district.

The Board selected Messrs. Kimball Brothers as engineers, and they made studies, etc. A topographical survey was made by Mr. Warren A. Manning. Messrs. Blackall, Clapp & Whittemore were appointed architects, and Messrs. Parker, Thomas & Rice were appointed consulting architects.

The Board extended an invitation to a committee of five superintendents, including Dr. Walter E. Fernald, superintendent of the Massachusetts School for the Feeble-minded, Dr. George L. Wallace, superintendent of the Wrentham State School, Dr. Edward French, superintendent of the Medfield State Hospital, Dr. George M. Kline, superintendent of the Danvers State Hospital, and Dr. Elisha H. Cohoon, administrator of the Psychopathic Department of the Boston State Hospital, to visit the site selected at Waltham and to offer suggestions regarding the location of buildings, etc. Several visits were made by this committee. An invitation was also extended to all of the superintendents to visit the architects' office and criticize the plans, which some of the superintendents have freely done.

The following schedule of salaries for medical staffs of State hospitals has been adopted, and informally approved by the finance committee of the Governor's Council: —

1. Medical superintendents shall receive a salary of from $3,000 to $5,000 per annum.

2. Assistant superintendents, or first assistant physicians in charge, shall receive a salary of from $1,800 to $2,500 per annum.

3. Pathologists, if directors of clinical psychiatry, shall receive a salary of from $2,000 to $2,500 per annum.

4. Clinical psychiatrists shall receive a salary of from $1,800 to $2,500 per annum.

5. Pathologists shall receive a salary of from $1,200 to $1,800 per annum.

6. Senior assistant physicians shall receive a salary of from $1,200 to $1,700 per annum.

7. Assistant physicians shall receive a salary of from $900 to $1,200 per annum.

8. Junior assistant physicians shall receive a salary of from $600 to $900 per annum.

9. Women physicians shall receive the salary of the rank to which they are appointed.

The following schedule of duties has been assigned for superintendents in State institutions under this Board: —

Superintendent, Chief Executive Officer. — He shall be the chief executive officer of the institution, and his directions shall be obeyed accordingly.

Entire Supervision and Control. — He shall have the general direction and management of the buildings, grounds and farm, together with the furniture, fixtures and stock, and shall have the direction and control of all persons engaged in the service of the institution.

Give Entire Time. — He shall reside on the premises and devote his entire time to the welfare of the institution.

Duties. — He shall personally maintain an effective supervision of all parts of the hospital and generally direct the care and treatment of the patients.

Daily Duties. — He shall daily ascertain the condition of patients, especially of all critical and urgent cases, and make frequent visits to the wards for the purpose.

Weekly Visits. — He shall, unless absent from the hospital, visit every part of the institution at least once each week.

Appoint Assistant Physicians. — He shall appoint, with the approval of the Board of Trustees, assistant physicians, the number to be determined by the State Board of Insanity, said physicians to qualify in accordance with the standards set by the State Board.

Appoint Subordinate Officers and Employees. — He shall appoint, subject to the approval of the Board of Trustees, such subordinate officers, and may employ such other persons, as may be necessary.

Keep in Touch with Work of Various Departments. — He shall keep in close touch with the heads of the different departments and know, either directly or through the heads of the several departments, that each department is carrying out its duties faithfully.

Discipline. — He shall maintain salutary discipline among all who are employed in the institution, and enforce strict compliance with his instructions and uniform obedience to all rules and regulations of the hospital.

Secure Good Conduct, Fidelity and Economy. — He shall give such

orders and instructions as he may deem best calculated to insure good conduct, fidelity and economy of labor and expense in every department.

Ascertain Qualifications of Employees. — He shall, before giving employment, make sure that the qualifications of all applicants are satisfactory.

Not to employ Persons suffering from Chronic or Communicable Diseases. — He shall cause such examination of nurses, attendants and employees coming in contact with patients to be made as shall give reasonable assurance that they are not suffering from any communicable disease.

Correspondence. — He shall see that all correspondence relating to patients and hospital affairs is conducted by him or by his authority and under his direction, and that copies of such correspondence as is important shall be made and kept on file.

Records relating to Business. — He shall cause full and fair accounts or records of the entire business operations of the hospital to be kept regularly from day to day in books or forms provided for that purpose.

Monthly Report to Board of Trustees. — He shall, at each regular meeting of the Board of Trustees, present a brief statement showing the general condition of the institution and its inmates, movement of population, the number of boarded-out patients, a brief report of the out-patient department, a report of any accidents, injuries or assaults, violent or unexplained deaths, and such other information as he shall deem necessary or advisable or as the Board of Trustees may require.

Training School. — He shall establish and maintain a training school for nurses and attendants, the courses of instruction to be in accordance with the syllabus adopted by the State Board of Insanity.

Clinical Records. — He shall cause a complete clinical record to be made of each patient, to be kept in such form and to comprise such matters as the State Board of Insanity may direct.

Daily Staff Meetings. — He shall conduct meetings of the medical staff daily, Sundays and holidays excepted, at which questions of diagnosis, prognosis and treatment of all cases admitted, the advisability of discharge of patients, and matters of medical service generally shall be considered.

Direct Treatment and Care. — He shall direct such medical, moral and physical treatment as in his judgment will be best adapted to the relief of patients.

Occupation for Patients. — He shall use every proper means to furnish to patients employment suited to their capacity and strength, and such as shall, in his judgment, be for their benefit.

Ascertain Home Conditions. — He shall, before a visit or discharge of a patient, first ascertain the environment and conditions under which the patient is to live, and shall satisfy himself that they are not such as to make probable a return of the patient's mental illness.

Religious Worship. — He shall see that each patient has an opportunity of attending, as far as possible, religious worship according to creed.

Send Reports to State Board of Insanity. — He shall send reports of the out-patient, social service and boarding-out departments to the State Board of Insanity as it shall direct.

Sudden Death or Communicable Disease. — He shall notify the State Board of Insanity and the pathologist to the State Board immediately on the sudden or unexplained death of any patient; and also upon the first appearance of any communicable, infectious or contagious disease among either patients or employees, sending duplicates of all reports to the State Department of Health.

Notify Relatives. — He shall notify immediately the relatives or friends of patients in cases of death or injury from any cause.

Forward Patients' Letters Unopened. — He shall forward, unopened, all letters of patients addressed to the governor, the State Board of Insanity, members of the State government and members of the Board of Trustees.

Annual Report. — He shall prepare and present, on or before January 1 of each year, an annual report covering the operations of the hospital, and such facts, results and recommendations as he may deem advisable, together with the required statistical tables, to the Board of Trustees, to be incorporated in their report to the State Board of Insanity.

Absence from Duty. — He shall not absent himself from the hospital for more than forty-eight hours at any one time without consulting the Board of Trustees.

Dr. Herman M. Adler, chief of staff of Psychopathic Department of Boston State Hospital, Dr. John A. Houston, superintendent of Northampton State Hospital, and Dr. A. Warren Stearns, assistant to the Board, were appointed a committee to examine the records of the different State institutions, and other material; and to report to the Board forms of blanks which would make the records and histories uniform in all of the institutions.

Dr. Adler was unable to complete his service on account of illness, and Dr. George M. Kline, superintendent of Danvers State Hospital, was appointed a member of the committee in his place.

It was voted to adopt the record blanks as presented by the committee for all institutions under the direction of the Board.

A committee, consisting of Dr. Ernest V. Scribner, superintendent of the Worcester State Hospital, Dr. Arthur V. Goss, superintendent of the Taunton State Hospital, and Dr. Elisha H. Cohoon, administrator of the Psychopathic Department of the Boston State Hospital, was appointed to consider a uni-

form curriculum for the training schools for nurses at the State hospitals.

At the Westborough State Hospital it was voted to approve of a postgraduate course in psychiatry, to be accepted as a training course for assistant physicians in the Westborough State Hospital service only, and that the graduates of such a training course would be considered proper officers for appointment in the Westborough State Hospital, this being the only homœopathic hospital in the State.

In December, 1914, it was voted by the Board that no sedatives, narcotics, alcoholics or other stimulants, including mixtures containing any of the above, be allowed on any ward or in any nurse's room adjoining a ward, in or near any building where there are patients, excepting for special cases, under conditions set forth by the State Board of Insanity; and that all antiseptics be kept in small quantities only, in locked closets on the wards, or, preferably, in each of the buildings off the wards, in one closet to which only the supervisor shall have access. Drugs, narcotics, alcoholic stimulants and all other medicines, whether poison or not, shall be dispensed in single doses from the dispensary, and, in the colony groups, from the bags of the attending physicians, in single doses, as prescribed.

The above vote was the result of a survey made by the Board of the purchases of liquors at institutions for the last five years, as follows: —

Purchases of Liquor for the Four-year Period at Institutions under Control of Board, Feb. 1, 1911, to Feb. 1, 1915.

Institution.	Brandy (Pints).	Champagne (Pints).	Gin (Pints).	Rum (Pints).	Whiskey (Pints).	Wine (Pints).[1]	Cost.
No. 1,	300.00	–	8	–	384.00	–	$166 81
No. 2,	2,397.76	25	132	763.6	928.72	1,220	1,491 68
No. 3,	–	–	–	–	–	1,640	140 29
No. 4,	118.08	–	–	30.6	240.80	40	113 58
No. 5,	146.00	–	–	–	40.00	38	83 00
No. 6,	625.00[2]	–	–	–	1,428.20	2,492	857 69
No. 7,	98.00	–	24	8.0	286.00	131	133 68
No. 8,	–	–	–	8.0	848.00	336	229 98
No. 9,	8.00	–	–	–	117.00	–	44 95
No. 10,	9.00	–	–	11.0	35.00	–	25 93
No. 11,[3]	8.00	–	–	–	386.75	5	192 83
No. 12,	–	–	–	–	2.00	–	1 00
No. 13,	–	–	–	–	32.00	–	8 11

[1] Includes sherry, port, Tokay, Angelica.

[2] Includes 40 pints blackberry brandy.

[3] These figures apply to both the insane and inebriates at this hospital up to June 1, 1914, and only to the insane since that date.

Since the above vote was passed, and a more careful custody of liquors instituted, there has been a considerable falling off in the use of the same by the hospitals, illustrating what a central body can do, as shown by the following table: —

Total Purchases of Liquor for 1915.

Institution.	Brandy (Pints).	Gin (Pints).	Rum (Pints).	Whiskey (Pints).	Wine (Pints).	Cost.
No. 1,	2	8	-	-	-	$5 81
No. 2,	4	-	-	-	-	1 98
No. 3,	-	-	-	-	416	35 67
No. 4,	-	-	7	-	-	3 26
No. 5,	38	-	-	24.00	-	22 25
No. 6,	55	4	-	296.24	112[1]	122 40
No. 7,	32	8	-	80.00	24	37 00
No. 8,	-	-	-	211.20	-	48 35
No. 9,	-	-	-	-	-	-
No. 10,	-	-	-	3.00	-	1 45
No. 11,	-	-	-	-	-	-
No. 12,	-	-	-	80.00	-	26 95
No. 13,	-	-	-	16.00	-	3 88

[1] Includes 32 pints blackberry.

In July, 1915, it was voted that hereafter seclusion shall include the shutting of doors with towels or otherwise, whether they are locked or unlocked, in such a way that the patient from the inside cannot open them, and that such procedure shall be reported as seclusion the same as if the door was locked, and permission shall be obtained from the physician in charge before shutting the doors; or, if sudden seclusion becomes necessary, it shall be immediately reported to, and investigated at once from, the office, and permission given, if approved of, by a member of the staff; and that no general orders for seclusion shall be given, and no orders shall be given which shall be effective for a longer period than twenty-four hours.

In December, 1914, Dr. A. Warren Stearns, assistant to the Board, was delegated by the Board to make a survey of all of the inmates at the Bridgewater State Hospital, and of the defective delinquents in the State institutions for the insane

and feeble-minded; to examine and determine the mental status of each of the inmates of the Bridgewater State Hospital, and of such patients at the other State institutions as the medical staffs at the said institutions determine "defective delinquents;" and to make a full report to the Board.

The Prison Commission sent the following resolve to this Board: —

Resolved, That this board desires to secure a survey of the population of the prisons under its management, with a view to determining the mental condition of the prisoners, and that the state board of insanity be requested to extend the survey it has undertaken of the inmates of institutions for the insane to the prison population.

It was, therefore, voted that Dr. A. Warren Stearns extend the survey to include the prison population, to ascertain each prisoner's mental status, and to make a report of the same.

On April 29, 1915, the Board voted to employ Mr. Cecilio S. Rossy, psychologist, to make such psychological tests as are necessary to complete the work of Dr. A. Warren Stearns in the Board's survey of the defective delinquents in the State hospitals and prisons.

The Board voted that Dr. Walter E. Fernald, superintendent of the Massachusetts School for the Feeble-minded, be called in conference with Dr. A. Warren Stearns, assistant to the Board, and Mr. Cecilio S. Rossy, psychologist, after the first 100 cases at the State Prison had been examined, to criticize the work and offer suggestions, and that from time to time thereafter Dr. Fernald be consulted by Dr. Stearns and Mr. Rossy.

Dr. Stearns discontinued his examination after the first 100 cases at the Massachusetts State Prison had been seen. Mr. Rossy continued the psychological test in 200 more cases, thus completing the psychological examination of nearly half the prison population.

Copies of the reports submitted may be found in Bulletins Nos. 12, 13, 16 and 17, issued by this Board.

In November, 1915, Dr. Harry C. Solomon was appointed special investigator of brain syphilis. (See report of pathologist, page 52.)

In answer to a petition signed by the State Board of Insanity and a committee of the Hospital Trustees Association, with the approval of the Governor, the following law was passed which changed the powers and duties of the trustees as follows: —

CHAPTER 241, GENERAL ACTS OF 1915.

AN ACT RELATIVE TO THE POWERS AND DUTIES OF THE STATE BOARD OF INSANITY AND OF THE TRUSTEES OF INSTITUTIONS UNDER ITS CHARGE.

Be it enacted, etc., as follows:

SECTION 1. Chapter seven hundred and sixty-two of the acts of the year nineteen hundred and fourteen is hereby amended by striking out section six and inserting in place thereof the following: — *Section 6.* With the approval of the board, the trustees shall appoint a superintendent for each institution who shall be a physician and who shall reside constantly at the institution. With the approval of the board, the trustees shall appoint a treasurer for each institution, who shall give bond for the faithful performance of his duties. With the approval of the board, the trustees may remove either or both superintendent and treasurer. With the approval of the trustees, the superintendent shall appoint assistant physicians. In those institutions receiving female patients and employing more than two assistant physicians, one of the assistant physicians shall be a woman. Except as hereinbefore provided, and subject to the approval of the trustees, the superintendent shall also appoint such subordinate officers and may employ such other persons as may be necessary. Subject to the approval of the trustees, and subject to the provisions of law, the superintendent may remove at any time any officer or employee appointed by him. The board shall make provision in its by-laws, or otherwise, for the appointment of such officers in each institution as it may deem necessary for the efficient, economical and humane management of the same, and shall determine, subject to the approval of the governor and council, the salaries of all of the officers. The superintendent and the assistant physicians at the Westborough state hospital shall belong to the homœopathic school of medicine. The board shall also establish by-laws and regulations, with suitable penalties, for the government of said institutions, and shall provide for a monthly inspection and trial of the fire apparatus belonging to the institutions and for the proper organization and monthly drill of the officers and employees in its use. The board shall ascertain by actual examination and inquiry whether commitments to the institutions are made according to law.

SECTION 2. Section eight of said chapter seven hundred and sixty-two is hereby amended by striking out the words "by actual examination and inquiry, and shall report to the state board of insanity, whether commitments to the institution are made according to law, and", in the first, second, third and fourth lines of paragraph *b*; by striking out paragraph *c*

of said section and inserting in place thereof the following paragraph: — *c.* There shall be thorough visitations of each institution by at least two of the trustees thereof in each month, and the duties of visitation shall be so assigned that visits shall be made by a majority of the trustees quarterly and by the whole board semi-annually, and reports of the visits shall be transmitted to the state board of insanity whenever there are matters observed that need the attention of the board. Paragraph *d* of said section is hereby amended by striking out the words "at least once in two weeks", in the second line. Paragraph *e* of said section is hereby amended by inserting at the beginning thereof the words: — Upon request of the board, — and by striking out the word "every", in the first line, and inserting in place thereof the word: — any. Paragraph *g* of said section is hereby amended by adding at the end thereof the words: — They shall transmit promptly to the state board of insanity a copy of the proceedings of each meeting, and said section is further amended by adding at the end thereof the following paragraph: — *k.* The trustees shall transmit to the governor and council, not later than the fifteenth day of December in each year, a report of the condition and needs of the institution under their charge, — so as to read as follows: — *Section 8.* The various boards of trustees established by general or special law for institutions maintained by the commonwealth for the care of the insane, feeble-minded, epileptics and dipsomaniacs, except the Norfolk state hospital and the Hospital Cottages for Children, shall have the following powers and duties: —

a. They shall, except as is otherwise provided in this act, retain all powers and duties now conferred or imposed upon them by law, and shall maintain an effective and proper inspection of their respective institutions, and shall from time to time make suggestions to the state board of insanity as to improvements therein, and especially such improvements as will make the administration thereof more effective, economical and humane.

b. The trustees of each institution shall ascertain whether the affairs of the institution are conducted according to law and according to the rules and regulations established by the board.

c. There shall be thorough visitations of each institution by at least two of the trustees thereof in each month, and the duties of visitation shall be so assigned that visits shall be made by a majority of the trustees quarterly and by the whole board semi-annually, and reports of the visits shall be transmitted to the state board of insanity whenever there are matters observed that need the attention of the board.

d. They shall carefully inspect every part of the institution as a board or by committees with reference to cleanliness and sanitary condition, the number of persons in seclusion or restraint, dietary matters, and any other matters that may be considered worthy of observation.

e. Upon request of the board, the trustees shall investigate any sudden death, accident or injury, whether self-inflicted or otherwise, and send a report of the same to the board.

f. All trustees shall have free access to all books, records and accounts pertaining to their respective institutions, and shall be admitted at all times to the buildings and premises thereof.

g. They shall keep a record of their doings, and shall record their visits to the institution in a book kept at the institution for that purpose. They shall transmit promptly to the state board of insanity a copy of the proceedings of each meeting.

h. They shall personally hear and investigate the complaints and requests of any inmates, officers or employees of the institution, and shall, if they deem the matter of sufficient importance, make written reports to the state board of insanity of their determination of what, if anything, ought to be done in the matter.

i. They shall have power at any time to cause the superintendent or any officer or employee of the institution to appear before them and to answer any questions or to produce any books or documents relative to the institution.

j. The plans and specifications for the construction or substantial alteration of buildings, the site of any new building, the proposed taking or purchase of any new land, and plans for the grading of grounds or other substantial improvements at the institutions of which they are trustees shall be submitted to them, and they shall report thereon to the board within such reasonable time as the board shall fix, and no land shall be taken or purchased, no new buildings shall be constructed, and no substantial changes made in existing buildings or grounds until the opinion of the trustees thereon has been transmitted, as aforesaid, to the state board of insanity, or until the time fixed therefor, as above provided, shall have expired.

k. The trustees shall transmit to the governor and council, not later than the fifteenth day of December in each year, a report of the condition and needs of the institution under their charge.

SECTION 3. This act shall take effect upon its passage. [*Approved May 10, 1915.*

REVIEW OF THE YEAR.

ALL CLASSES UNDER CARE.

The number and location of these classes Oct. 1, 1915, were: —

Location.	Insane.[1]	Feeble-minded.	Epileptic (Sane).	Voluntary (Sane).	Inebriate.	Temporary Care.	Totals.	Other Classes.
Worcester State Hospital,	1,453	–	–	1	–	5	1,459	–
Taunton State Hospital,	1,332	–	–	–	–	4	1,336	–
Northampton State Hospital,	953	–	–	2	–	–	955	–
Danvers State Hospital,	1,504	–	–	–	–	4	1,508	–
Westborough State Hospital,	1,247	–	–	8	46	2	1,303	–
Boston State Hospital,	1,544	–	–	–	–	43	1,587	–
Mental Wards, State Infirmary,	709	–	–	–	–	–	709	–
Grafton State Hospital,	1,614	–	–	–	–	–	1,614	–
Medfield State Hospital,	1,677	–	–	–	–	–	1,677	–
Gardner State Colony,	760	–	–	–	–	–	760	–
Monson State Hospital,	366	–	649	–	–	–	1,015	–
Bridgewater State Hospital,	822	–	–	–	–	–	822	–
Foxborough State Hospital,	329	–	–	–	–	–	329	–
Family care, under State Board,	86	–	–	–	–	–	86	–
Massachusetts School for the Feeble-minded at Waltham.	–	1,634	–	–	–	–	1,634	–
Wrentham State School,	–	674	–	–	–	–	674	–
McLean Hospital,	210	–	–	1	–	–	211	–
Twenty-two other private institutions,	140	1	–	15	7	–	163	57
Elm Hill Private School and Home for the Feeble-minded.	–	49	–	–	–	–	49	–
Terrace Home School,	–	12	–	–	–	–	12	–
Almshouses,	–	234[2]	–	–	–	–	234	–
Total under care,	14,746	2,604	649	27	53	58	18,137	57
Viz.: —								
Public care,	14,396	2,542	649	11	46	58	17,702	–
Institutions and family care under trustees.	14,310	2,308	649	11	46	58	17,382	–
Family care under State Board,	86	–	–	–	–	–	86	–
Almshouses,	–	234	–	–	–	–	234	–
Private care,	350	62	–	16	7	–	435	57
McLean Hospital,	210	–	–	1	–	–	211	–
Twenty-four private institutions,	140	62	–	15	7	–	224	57

[1] Includes patients placed in family care by trustees.

[2] Taken from reports of overseers of poor, March, 1915.

THE WHOLE NUMBER OF THESE CLASSES under care Oct. 1, 1915, was 18,137, being 1 such person to every 203 of the population of the State. Of this number, 14,746, or 81 per cent., were insane; 2,604, or 14 per cent., feeble-minded; and 649, or 3 per cent., epileptic (sane). Their increase for the year was 833.

The whole number of such persons under public care was 17,702; under private care, 435.

The increase of such persons under public care for the year was 834; their average annual increase for the last five years, 596.

THE INSANE

under care Oct. 1, 1915, numbered 14,746, being 1 insane person to every 250 of the population of the State. In addition, there were 941 persons who were temporarily absent from institutions, and a considerable number of others in the community who had been previously discharged or had never appeared in institutions for the insane.

The insane appear under public care in public institutions and boarded out in family care, at public expense, and under private care in private institutions. Their number and increase in these locations for the year, the last five years, the last ten years and the last twenty-five years are shown as follows: —

	Number Oct. 1, 1915.			Increase over Previous Years.					Average Increase, Five Years.	Average Increase, Ten Years.	Average Increase, Twenty-five Years.
	Males.	Females.	Totals.	1915.	1914.	1913.	1912.	1911.			
Public institutions,[1] .	7,061	7,249	14,310	831	396	379	417	308	466.2	456.6	395.52
Family care under State Board.	1	85	86	216[2]	34[2]	20	18	23	37.8[2]	16.7[2]	2.48[2]
Total, public, .	7,062	7,334	14,396	615	362	399	435	331	428.4	448.8	393.04
Private institutions, .	107	243	350	9	6[2]	2	16	9	6.0	10.5	4.68
Total, public and private.	7,169	7,577	14,746	624	356	401	451	340	434.4	438.3	397.72

[1] Includes 317 patients in family care under trustees. [2] Decrease.

THE INCREASE OF THE INSANE

under care for the year was 624, compared with 356 the previous year; 434, the average annual increase for the last five years; 438, the last ten years; and 397, the last twenty-five years.

The number of nonresident insane was 74, compared with 70 the previous year, and 73, the average number the last five years. Of these, 68 were patients in private institutions; and 6, private patients in State hospitals.

It is the policy of the State not to receive into its institutions nonresidents, even as private patients, unless their friends are resident in Massachusetts and have just claims for such service.

THE INCREASE OF THE INSANE UNDER PUBLIC CARE

was 615, compared with 362 the previous year; 428, the average annual increase for the last five years; 448, the last ten years; and 393, the last twenty-five years.

THE INCREASE OF THE INSANE UNDER PRIVATE CARE

was 9, compared with a decrease of 6 the previous year; 6, the average annual increase for the last five years; 10, the last ten years; and 4, the last twenty-five years.

In addition to the insane, there were in private institutions *for the insane* 81 other patients, compared with 77 the previous year. Of these, 16 were sane voluntary mental patients, 57 voluntary nonmental patients, 7 inebriates and 1 feeble-minded. One of the voluntary sane patients was in the McLean Hospital, where 34.61 per cent. of all patients were under the voluntary relation, without commitment as insane.

THE DECREASE OF THE INSANE IN FAMILY CARE UNDER THE STATE BOARD

was 216, the Board having transferred 178 from its family care department to family care under trustees. The number in family care under institutions on Oct. 1, 1915, was 317.

ALL ADMISSIONS OF MENTAL PATIENTS

from the community to public institutions and McLean Hospital were 4,171, compared with 4,068 the previous year, and 3,769, the average the last five years. The increase this year was 103, compared with a decrease of 17 the previous year, and 183, the average increase the last five years.

They comprise court commitments as insane, voluntary admissions of the insane, and voluntary admissions of mental patients who were classed as sane.

Court commitments as insane were 3,445, compared with 3,351 the previous year, and 3,270, the average the last five years. The increase was 94, compared with a decrease of 142 the previous year, and 80, the average increase the last five years.

Voluntary admissions of the insane were 685, compared with 543 the previous year. Public institutions received 635 such patients, of whom 81, or 12.59 per cent., required subsequent commitment as insane. McLean Hospital received 50 such patients, of whom 3, or 6 per cent., required subsequent commitment as insane.

Voluntary admissions of mental patients who were classed as sane were 125, compared with 235 the previous year. Public institutions received 124 such patients, and McLean Hospital, 1.

ALL VOLUNTARY ADMISSIONS

to public institutions and McLean Hospital were 810, compared with 778 the previous year, and 548, the average the last five years. Public institutions received 759 such patients, compared with 718 the previous year, and 497, the average the last five years. McLean Hospital received 51 such patients, compared with 70 the previous year; and 67, the average the last five years.

FIRST CASES OF INSANITY

appeared in public institutions and McLean Hospital to the number of 3,147, compared with 2,986 the previous year, and 2,893, the average the last five years. The increase was 161, compared with a decrease of 122 the previous year, and 113, the average increase the last five years.

Of all the commitments of the insane to these institutions (inclusive of insane voluntary patients), 77.78 per cent. appeared for the first time in any institution for the insane.

One insane person came under care for the first time from every 1,173 of the population of the State, compared with 1,207 the previous year, and 1,220, the average from 1910 to 1915. The estimated increase in the population of the State for the year is 87,788; hence the growth of population would have accounted for an increase of 74 in the first cases of insanity. As shown above, there was an actual increase of 161.

THE NATIVITY

of such first cases of insanity does not differ materially from the percentages of the previous year.. Exclusive of 37, or 1.17 per cent., whose birthplaces were unknown, 1,241, or 39.90 per cent., were born in Massachusetts; 1,522, or 48.93 per cent., in New England; 1,692, or 54.41 per cent., in the United States; and 1,418, or 45.59 per cent., in foreign countries.

THEIR PARENTAGE

also corresponds substantially with the percentages of previous years. Exclusive of 181, or 5.75 per cent., whose birthplaces were unknown, 484, or 16.31 per cent., of the mothers were born in Massachusetts; 752, or 25.35 per cent., in New England; 878, or 29.60 per cent., in the United States; and 2,088, or 70.39 per cent., in foreign countries.

Exclusive of 190, or 6.03 per cent., whose birthplaces were unknown, 476, or 16.09 per cent., of the fathers were born in Massachusetts; 758, or 25.63 per cent., in New England; 867, or 29.32 per cent., in the United States; and 2,090, or 70.67 per cent., in foreign countries.

THEIR AGES

vary but little from the averages of previous years. The age of 60 or more had been reached by 576, or 18.37 per cent., when admitted for hospital treatment; by 444, or 16.69 per cent., when insanity began. The mean age was 43.75 years on admission; 39.91 years at the onset of mental disease.

THE LOCALITIES

where they resided at the time of commitment, and where insanity developed, in the main show that the country districts furnish relatively fewer cases of insanity than the more populous centers. The cities and towns of over 10,000 inhabitants comprise 80 per cent. of the total population of the State for 1915, and country districts only 20 per cent., whereas 2,582, or 82.05 per cent., of the commitments were made from the former, and 565, or 17.95 per cent., from the latter.

THE CAUSES OF INSANITY

assigned by the physicians of the hospitals were physical in 1,893, or 60.15 per cent.; mental in 84, or 2.67 per cent.; unknown in 1,119, or 35.55 per cent.; and not insane in 51, or 1.62 per cent.

Congenital causes were assigned in 7.34 per cent.; heredity alone in 5.18 per cent., with other causes, 11.47 per cent., making heredity a causative factor in 16.65 per cent.; alcoholic intemperance alone in 12.71 per cent., with other causes, 4.35 per cent., making alcohol a causative factor in 17.06 per cent.; senility in 10.17 per cent.; coarse brain lesions in 5.82 per cent.; and syphilis in 9.66 per cent. These six causes were operative in 66.70 per cent. of this year's first cases of insanity.

THE CURABILITY OF MENTAL DISEASE

in this year's first cases of insanity is practically the same as last year, and does not vary materially from the average.

The mental disease was classed as curable in 676, or 21.48 per cent., of first cases, compared with 21.20 per cent. the previous year, and 22.69 per cent., a five years' average. The

outcome in 6,621 such cases (an eleven-year period) indicates an expectation of recovery in 1 out of 2.24 cases.

The mental disease was classed as generally incurable in 1,140, or 36.22 per cent. The outcome in 10,294 such cases (an eleven-year period) indicates an expectation of recovery in 1 out of 27.30 cases.

The mental disease was classed as incurable in 1,095, or 34.80 per cent. The outcome in 10,258 such cases (an eleven-year period) indicates an expectation of recovery in 1 out of 936.18 cases.

Certain Forms of Mental Disease

occur with great frequency; manic-depressive insanity in 12.23 per cent. of this year's first cases of insanity and in 58.43 per cent. of the forms of mental diseases classed as curable; and acute alcoholic insanity in 5.02 per cent. of first cases and in 23.37 per cent. of the forms classed as curable. These two forms comprised 17.25 per cent. of first cases, compared with 18.19 per cent. the previous year, and 19.09 per cent., a five years' average. They comprised 81.80 per cent. of forms of mental disease classed as curable, compared with 85.78 per cent. the previous year, and 83.48 per cent., a five years' average. They furnished 68.72 per cent. of first recoveries, compared with 70.83 per cent. the previous year, and 72.08 per cent., a five years' average.

In the groups classed as incurable and generally incurable, dementia præcox occurred in 25.55 per cent. of first cases; chronic alcoholic insanity in 4.48 per cent.; imbecility in 5.56 per cent.; senile insanity in 9.02 per cent.; epileptic insanity in 2.99 per cent.; general paralysis in 8.23 per cent.; and coarse brain lesions in 8.80 per cent. These seven forms, classed as practically incurable, comprised 64.63 per cent. of first cases of insanity, and furnished 9.27 per cent. of first recoveries.

These nine forms of disease comprised 81.88 per cent. of this year's first cases of insanity, compared with 82.39 per cent. the previous year, and 80.65 per cent., a five years' average.

THE DURATION OF MENTAL DISEASE

previous to hospital treatment was less than three months in 947, or 35.26 per cent., of first cases, compared with an average of 37.85 per cent. the last five years; less than six months in 1,240, or 46.17 per cent., compared with an average of 49.25 per cent. the last five years; less than one year in 1,541, or 57.37 per cent., compared with an average of 59.95 per cent. for five years; and one year or more in 1,145, or 42.63 per cent., compared with an average of 40.05 per cent. for five years.

The significance of the previous duration of mental disease is evident from the fact that out of 3,177 first recoveries (an eleven-year period), 72.27 per cent. had a previous duration less than three months; 83.78 per cent. less than six months; 91.66 per cent. less than one year; and only 8.34 per cent. one year or more; while the whole duration of insanity was less than three months in 28.67 per cent.; less than six months in 57.06 per cent.; less than one year in 77.69 per cent.; and one year or more in only 22.31 per cent. These percentages have been substantially constant for the last eleven years.

ALL DISCHARGES.

THE RESULTS OF MENTAL DISEASE

at public institutions and McLean Hospital are shown in the condition of patients on discharge: 410 recovered; 305 were capable of self-support; 794 were improved; 510 not improved; and 167 not insane.

THE RECOVERY RATE

for the whole State was 10.21 per cent. of commitments, inclusive of insane voluntary admissions, compared with 13.46 per cent. the previous year, and 13.06 per cent., a four years' average.

The percentages of recoveries in public institutions and McLean Hospital were: —

Of commitments (inclusive of insane voluntary), ...	10.13;	last four years' average, 12.91
Of whole number of persons, . .	2.27;	last four years' average, 2.86
Of daily average number, . .	2.91;	last four years' average, 3.64

There were 291 recoveries of first cases of insanity, being 9.25 per cent. of such first admissions, compared with 12.06 per cent. the previous year, and 11.75 per cent., a four years' average.

There were discharged,

Capable of Self-support

from public institutions and McLean Hospital, 305, or 7.53 per cent. of the commitments, compared with 8.10 per cent. the previous year.

The Restoration of the Insane

for the whole State to self-support in the community includes both the recovered and those discharged capable of self-support. Together they numbered 749 this year, or 17.82 per cent. of commitments, including insane voluntary admissions. The percentages of both these classes in public institutions and McLean Hospital were: —

Of commitments (inclusive of insane voluntary),	17.67;	last four years' average, 21.66
Of whole number of persons,	3.95;	last four years' average, 4.85
Of daily average number,	5.06;	last four years' average, 6.09

DEATHS.

The Death Rate of the Insane

for the whole State during the year was 68.8 per thousand of the whole number of persons treated, compared with 75.8 the previous year, and 74.7, a four years' average.

The percentages of deaths in public institutions and McLean Hospital were: —

Of whole number of persons,	6.91;	last two years' average, 7.32
Of daily average number,	8.87;	last two years' average, 9.34
Of discharges and deaths,	36.40;	last two years' average, 37.70

Mental disease classed as curable was present in 9.75 per cent. of persons who died, compared with 10.59 per cent. the previous year.

The percentage of deaths of first cases occurring within the

first three months of hospital residence was 30.16, against 29.02 in 1914, 29.63 in 1913, 30.51 in 1912, and 28.05 in 1911.

Senile insanity was present in 19.98 per cent. of all deaths, general paralysis in 15.43 per cent., and coarse brain lesions in 16.63 per cent.

These supposedly incurable brain lesions existed in 52.04 per cent., compared with 50.76 per cent. the previous year.

Tuberculosis was present in 10.71 per cent., compared with 11.20 per cent. the previous year.

Pneumonia (lobar, broncho and hypostatic) was present in 18.63 per cent., organic disease of the heart in 14.47 per cent., organic disease of the kidneys in 4.24 per cent., and malignant tumors in 2.40 per cent.

The statistical data on which the foregoing statements and conclusions are based are found in Tables Nos. 19, 20 and 21 of the Appendix.

THE FEEBLE-MINDED.

The Whole Number of the Feeble-minded

under care Oct. 1, 1915, was 2,604, being 1 feeble-minded person to every 1,418 of the population of the State.

The feeble-minded appear under public care in public institutions and almshouses, and under private care in private institutions. Their number and increase in these locations for the year and the last five years are shown as follows: —

	Number Oct. 1, 1915.			Increase over Previous Years.					Average Increase, Five Years.
	Males.	Females.	Totals.	1915.	1914.	1913.	1912.	1911.	
School for the Feeble-minded at Waltham.	1,014	620	1,634	69	68	56	66	22	56.2
Wrentham School,	278	396	674	45	206	19	137	53	92.0
Hospital Cottages for Children,	-	-	-	-	22[1]	8[1]	-	13	3.4[1]
Almshouses,	112	122	234	64	82[1]	13[1]	35	31	7.0
State Infirmary,	-	-	-	-	144[1]	23	53	68	-
Total, public,	1,404	1,138	2,542	178	26	77	291	187	151.8
Elm Hill,	38	11	49	5[1]	1[1]	3	1[1]	-	.8[1]
Small private institutions,	5	8	13	-	-	3[1]	5	1	.6
Total, public and private,	1,447	1,157	2,604	173	25	77	295	188	151.6

[1] Decrease.

THE INCREASE OF THE FEEBLE-MINDED under care for the year was 173, compared with 25 the previous year, and 151, the average the last five years.

The reason for the apparently small increase in the number of the feeble-minded for 1914 is explained by the removal of the Hospital Cottages for Children to the supervision of the State Board of Charity, and the elimination in this year's tabulation of the so-called feeble-minded at the State Infirmary.

The increase for the year at the Massachusetts School for the Feeble-minded and the Wrentham State School was 114.

The number of nonresident feeble-minded was 54, compared with 65 the previous year. Of these, 37 were patients in private institutions; and 17, private patients in State institutions.

It is the policy of the State to receive feeble-minded persons from other States only when there is no school for the feeble-minded in such States, and then only in urgent cases. The nonresident patients are paid for at a rate which fully compensates the State for the cost of their maintenance.

THE EPILEPTIC.

THE WHOLE NUMBER OF THE EPILEPTIC under care Oct. 1, 1915, was 1,462, being 1 epileptic to every 2,526 of the population of the State.

The epileptic appear under public care in the Monson State Hospital, the State hospitals and other public institutions, and under private care in private institutions. Details will be found under the Monson State Hospital.

Their number and increase in these locations for the year and for the last five years are shown as follows: —

	Number Oct. 1, 1915.			Increase over Previous Years.					Average Increase, Five Years.
	Males.	Females.	Totals.	1915.	1914.	1913.	1912.	1911.	
Monson Hospital,	525	490	1,015	52	41	35	36	81	49.0
State hospitals, etc.,	230	194	424	22	5	18[1]	35	61[1]	3.4[1]
Other public institutions,[2]	8	5	13	21[1]	71[1]	9	15[1]	21[1]	23.8[1]
Total, public,	763	689	1,452	53	25[1]	26	56	1[1]	21.8
Private institutions,	6	4	10	3[1]	1	1	-	3[1]	.8[1]
Total, public and private,	769	693	1,462	50	24[1]	27	56	4[1]	21.0

[1] Decrease. [2] Includes one patient in family care.

In addition, the overseers of the poor report (March 31, 1915) 83 epileptics in city and town almshouses and private families.

THE INCREASE OF THE EPILEPTIC

under care for the year was 50, compared with a decrease of 24 the previous year, and 21, the average increase the last five years.

The reason for the apparent decrease in the number of epileptic in 1914 was due to the removal of the Hospital Cottages for Children to the supervision of the State Board of Charity.

REPORT OF THE PATHOLOGIST.

To the State Board of Insanity.

The duties of the State Board's pathologist since May 1, 1909, have been (1) supervision of the clinical, pathological and research work in the various institutions under the Board's supervision and control; (2) visits to the institutions from time to time; and (3) reports to the Board comprising conditions, observations and such recommendations as result therefrom.

I. GENERAL.

A notable extension of the work of the pathologist to the State Board was made in July, 1914, when the pathological service came into existence with the appointment of Dr. Myrtelle M. Canavan as assistant pathologist, and the subsequent com-

pletion of the service as a unit by the appointment of a stenographer and a technician. The work of the service is installed in the Psychopathic Hospital laboratories, where chemical, bacteriological, histological and other examinations are made of such material as is gathered from institutions not possessing laboratory units of their own. The routine work of this service is presented in Section II. below.

Just as the fifth year of the pathologist's work was marked by the establishment of a definite working service under the assistant pathologist, so the sixth year was marked by an equally important development, namely, the establishment of a special therapeutic investigation into brain syphilis under a special trained officer, Dr. Harry C. Solomon. Dr. Solomon had done preliminary work upon the systematic investigation of the various forms of brain syphilis (see below, Section V.), and was appointed as a salaried officer of the State Board on November 15.

The work of Drs. Canavan and Solomon has run closely together, since the lumbar puncture findings and the post-mortem results in fatal cases, with and without different forms of antisyphilitic treatment, form problems that cross one another at innumerable points.

The financing of the State Board's medical investigation work is difficult to explain until the twofold function of the Psychopathic Hospital is clearly understood. The Psychopathic Hospital has (*a*) its metropolitan district function, as receiving station, observation ward and mechanism for acute, intensive and special treatment, and (*b*) its State-wide clinical and research function, including preparatory and extension training courses for State hospital physicians. As it is not possible readily to separate the metropolitan district function from the State-wide function of the hospital, it has, up to the present time, proved best to have both the functions largely paid for out of appropriations to the Boston State Hospital. Nevertheless, the payment of salaries to the director and other officers of the pathological service, and the expenditure of that portion of the State Board's annual appropriation for investigation and publication upon investigations and researches into diagnosis and treatment centering in the Psychopathic Hospital building, signifies that the State Board and the Boston State Hospital trustees are agreed upon the employment of State Board officers and State Board appropriation for a certain portion of the State-wide clinical and research function of the Psychopathic Hospital.

The State Board's estimates have, since 1911, included an estimate of $2,500 for investigation as to the nature, causes, results and treatment of mental disease and defect, and for the publication of the results thereof. This portion of the general maintenance estimate of the State Board has regularly been granted, since it was included in the estimate published in the twelfth annual report of the State Board for the year ending Nov. 30, 1910. This appropriation is intended (see page 53 of that report) to carry out provisions of section 6, chapter 504, Acts of 1909, for the encouragement of scientific investigation by the medical staffs of the various institutions. The estimate for 1916 includes a sum of $5,000 for the purposes above mentioned, being a doubling of the sum formerly appropriated on account of the necessities of the special work in the treatment of brain syphilis. It is hoped that this increase will be granted by the Legislature.

As numerous inquiries are received from other States concerning the expenses of Massachusetts insanity investigations, it may be stated that if the salaries of the pathologist (who is also director of the Psychopathic Hospital), the assistant pathologist, the special medical investigator into brain syphilis and subordinate officers, together with the appropriation of $2,500 for investigations and publication, be considered, the State Board of Insanity is spending somewhat over $10,000 upon investigation and publication. It is true that a portion of the pathologist's duties as director of the Psychopathic Hospital have to do with the metropolitan district function of the Psychopathic Hospital, and not with the duties of investigation. It is also true, however, that the pathologists to the different State institutions, all of whom have been, by arrangement between the State Board and the trustees of the institutions, appointed "prosectors" to the State Board of Insanity, are performing investigative functions which form part and parcel of the general investigations of the State Board. The salaries of these pathologists and their technical assistants are paid from the appropriations of the several institutions with which they are connected. Any account of the expense of investigation into mental disease and defect in Massachusetts, so far as it involves concerted action under the pathologist to the Board, would then take into account (*a*) the salaries of the special Board officers above mentioned; (*b*) the appropriation for investigation and publication; (*c*) an undetermined portion of salaries and wages and expenses in-

curred in connection with work in State hospital laboratories under the general jurisdiction of the State Board's pathologist; and (*d*) an undetermined portion of the appropriation of the Boston State Hospital (so far as the functions of the Psychopathic Hospital unit are properly considered State-wide functions).

It is, accordingly, difficult or impossible at present to determine how much is being spent upon investigation into mental disease and defect by the Commonwealth, and equally difficult to determine what return there is to the State for such expenditure. In a general way it may be stated that Massachusetts, New York, Michigan and Illinois are the only States of the Union in which co-ordinated work of investigation and research in a large group of institutions is being carried out. The pathological service of the State Board of Insanity, with the Psychopathic Hospital as main investigation station and several State hospital laboratories as branch stations, is one of the most thoroughly organized of such services in the country at large. New York has an elaborate system turning upon the Psychiatric Institute (Prof. August Hoch, director), maintained under the State Board of Lunacy in connection with the Manhattan State Hospital. Michigan's research and investigation head up in the Psychopathic Ward at Ann Arbor, opened in 1906 (Prof. A. M. Barrett, director), and the Michigan statutes provide means of coordinating the work of the central laboratory with that of the other institutions. Illinois possesses a Psychopathic Institute at Kankakee (Prof. H. Douglas Singer, director), and co-ordinated work is being executed in the other institutions of the State in relation to the work of the institute.

Massachusetts has in its Psychopathic Hospital building and apparatus the beginnings of a system as elaborate and as likely to secure important results as any system existent in the States mentioned or any other States. The Massachusetts plan will also pass muster in comparison with arrangements in most foreign countries. But few of the numerous psychiatric clinics of the German-speaking countries are provided with as much space and equipment as the Psychopathic Hospital in Massachusetts. Several have been more active on account of the momentum of maturity and liberal governmental grants which have been made in increasing amounts since the elaboration of the psychiatric clinic idea by Griesinger in 1868. The time is not ripe in which to pass definitely upon the value of the Massachu-

setts results; it can only be said that the plan has the approval of the most advanced governmental units that have to deal with large numbers of mental defectives.

In order that there may be presented in one place a notion of the specialized laboratory personnel of the State institutions, the following list is offered: —

LABORATORY STAFF OF STATE BOARD OF INSANITY.

E. E. Southard, M.D., pathologist, appointed May 1, 1909.
Myrtelle M. Canavan, M.D., assistant pathologist, appointed July 1, 1914.
Harry C. Solomon, M.D., special investigator in brain syphilis, appointed Nov. 15, 1915.
Lillian D. Rider, secretary, appointed Nov. 16, 1914.
Ellen R. Scott, technician, appointed Dec. 15, 1914.

LABORATORY STAFFS OF THE STATE INSTITUTIONS.

Worcester State Hospital.

Harold I. Gosline, M.D., pathologist, appointed July, 1915.
Carrie Sherwood, technician and stenographer, appointed June, 1910.
R. Primrose, laboratory assistant, appointed November, 1915.
The Junior Physician on each clinical service aids in post-mortem examinations from his service.
The Worcester laboratory was founded in 1895, and its first pathologist was Dr. Adolf Meyer. The laboratory building was opened in 1905.

Taunton State Hospital.

Abraham Myerson, M.D., clinical director and pathologist, appointed Sept. 13, 1913.
Linneon R. Smith, stenographer, appointed July, 1914.
Ross McCann, laboratory assistant, appointed December, 1913.
The Taunton laboratory was founded in 1896, and its first pathologist was Dr. Frederick S. Ward.

Danvers State Hospital.

Lawson G. Lowrey, M.D., pathologist and assistant physician, appointed June, 1914.
Rose McKeown, technician, appointed December, 1914.
The Danvers laboratory was founded in 1895, and its first pathologist was the late Dr. William Leonard Worcester.

Westborough State Hospital.

Solomon C. Fuller, M.D., pathologist, appointed 1897.
Miss Emily Robinson, technician, appointed March 17, 1913.
A system by which internes aid in the laboratory is contemplated.
The Westborough laboratory work may be said to have been begun in 1897 with the appointment of Dr. E. Lindon Mellus. The laboratory building was built in 1905.

Boston State Hospital.

Mary E. Morse, M.D., pathologist, appointed January, 1915.
Marion Stone, technician, appointed February, 1915.
The pathological work of the Psychopathic Department of the Boston State Hospital is executed by Myrtelle M. Canavan, M.D., assistant pathologist to the State Board of Insanity. An interne assists.

Monson State Hospital.

Douglas A. Thom, M.D., assistant physician and pathologist, appointed July, 1912.
Edna C. Gay, technician, appointed April, 1914.

Mental Wards, State Infirmary.

Rudolph Kohn, M.D., pathologist, appointed April, 1915.
James A. Bradley, A.B., laboratory assistant, appointed June 5, 1914.
There is no special laboratory work for the Mental Wards. Mr. Bradley's work in biological chemistry is under the direction of Thomas E. Buckman, A.M.
The first laboratory at Tewksbury was established in 1895, under the direction of Dr. John M. Gile.

Massachusetts School for the Feeble-minded.

Laboratory work of a special research nature is being carried on by Drs. E. E. Southard, Annie E. Taft and Myrtelle M. Canavan.

McLean Hospital.

E. Stanley Abbott, M.D., assistant physician and pathologist.
F. Lyman Wells, Ph.D., assistant in psychological pathology.

In addition to the salaried staff of the State Board, the pathologists of the several institutions have been empowered to act from time to time as prosectors to the pathological service, and are reimbursed by said Board for ordinary expenses incurred

in Board work, such as investigations of medicolegal and special cases. The establishment of the prosector plan has served to draw together still more closely the scientific and specialized laboratory interests throughout the State. (The vote concerning prosectors was passed July 1, 1915.) The interchange of material and ideas among the specialized officers has been favored by the plan. The undersigned as pathologist has borne steadily in mind the necessity of avoiding bureaucratic and uniformitarian tendencies, which however important in finance are suicidal to science and to pathological science especially.

The following table shows the routine work of the investigative staff of the State Board of Insanity: —

Visits to institutions by pathologist,	41
By assistant pathologist,	186
By syphilographer,	8
Autopsies,	152
Sudden deaths,	85
Autopsies in cases of sudden death,	48
Severe accidents in institutions,	174
Less severe accidents,	156
Total accidents,	330
Circular letters,	32
Publications,	45

By way of conclusion to this general part of my report, I wish to thank the institutions, and particularly the superintendents and the pathologists, for their courtesy and co-operation in the work of the pathological service and in more general ways.

Where aid or advice was wanted by the local institution, the service has endeavored to give such aid or advice and to transmit the facts and ideas evolved to all other institutions in the form of circular letters. The total number of circular letters during the year ending Nov. 30, 1915, was 32. The topics have varied from matters of routine, such as lists of proper autopsy instruments for each institution to buy, up to theoretical considerations such as *folie à deux*.

The scientific atmospheres of the several institutions always varied. In former days there were institutions not entirely free from the appearance of complacency and of a certain effect of *noli me tangere* when it came to questions of supervision and suggestion from above. These false ideals of autonomy have virtually passed away, to be replaced with a truer spirit of autonomy, pride and emulation. Those upholding the spirit of

science in institutions have always felt that more could be obtained from the superintendent as a rule than from his first assistant or administrative officer. I am glad to report that with the increase of contact between clinical and laboratory men (largely induced by the necessities of syphilis therapy) the older friction between first assistant physicians and pathologists is passing away.

II. Routine of the Pathological Service: Autopsies.

The pathological service has been in existence seventeen months, during which period *246* autopsies have been performed, in the majority of cases by the service officers, but in some instances by hospital pathologists acting as prosectors. There were 152 autopsies performed in the year ending Nov. 30, 1915. One practical object of the arrangement has been to cover by special inquiry all cases of sudden or mysterious death, preparing for, aiding and supplementing the work of the medical examiners, from whom a large measure of co-operation has been secured so far as was consistent with law. Outside Suffolk County (including Boston), wherein the examiners are paid in lump sum, it has sometimes been found that certain district attorneys have ordered a minimum of autopsies (separately paid for) on the ostensible ground of saving county money. In the past it is probable, nay certain, that a certain amount of county money has been "saved," but problems practically important to the community have been left unsolved. The pathological service has in a number of instances, by a discovery of broken ribs in routine external viewing of the body, compelled medicolegal examination which would otherwise have not been made. The service has also made possible special neurological examinations, as well as other histological, bacteriological and chemical work, in the elucidation of the causes of death, which are not possible of execution by medical examiners through lack of time, means, aid or knowledge. The routine medicolegal examination cannot, in the nature of the general situation, be supposed to enter questions of hidden infection (such as septicemia without sign in the organs) or intoxication (such as the so-called *Hirntod*, of which a nonlegal example was described by Orton, Worcester State Hospital Contribution, S. B. I. 1913–15, American Journal of Insanity, 1913). The work of the service in such directions has been of practical value.

Another object of the arrangement has been to cover the

autopsy work of institutions not possessing laboratories or specialized officers fitted for autopsy work. In the nature of things, it is uneconomical for hospitals with small budgets to provide for laboratories, since the staff of a laboratory costs from $2,000 to $2,500 on pay roll, perhaps $500 more for routine expenses, and occasional items of special expenditure, as well as a first cost of, say, $2,500. (These figures are for a laboratory of modest though by no means niggardly proportions.) Institutions without laboratory service from some source naturally remain in the scientific phase of institutions of the early 90's or 80's of the last century; no advance can be expected in them, and little advance has ever been got from them. It has therefore been the policy of the State Board to "carry the mountain to Mahomet," and supply pathological service, where wanted, to institutions without laboratory facilities. There seems to be no doubt that this plan has met with favor. In one instance (Medfield) so many autopsies have been performed (42) that it is clear that a laboratory should be established around this work as a nucleus, so that the general clinicopathological values of a laboratory in and of the institution can be realized. The trustees and superintendent of Medfield are, I believe, fully cognizant of this need.

Following is the number of autopsies performed in the different institutions during the year ending Nov. 30, 1915: —

Medfield State Hospital,[1]	42
Worcester State Hospital,[2]	23
Foxborough State Hospital,[1]	18
Psychopathic Hospital,[3]	17
Boston State Hospital,	11
Bridgewater State Hospital,[1]	9
Massachusetts School for the Feeble-minded,[1]	8
Danvers State Hospital,	7
Monson State Hospital,	5
Northampton State Hospital,[1]	5
Westborough State Hospital,	2
Gardner State Colony,[1]	1
Taunton State Hospital,	1
State Infirmary, Tewksbury,	1
Miscellaneous,	2
Total,	152

[1] Institution has no pathologist.

[2] These autopsies were performed largely before appointment of the present pathologist.

[3] The pathological service of the State Board acts for the Psychopathic Hospital.

In addition to 152 autopsies, there were 26 viewings of bodies in the institutions not followed by autopsies by the pathological service but occasionally followed by autopsies by medical examiners.

In all during the year there were 85 cases of a medicolegal nature such that the medical examiner was at once or eventually called in. The cases in which viewing alone was the procedure were cases, as a rule, of a more or less obvious nature, although in the opinion of the undersigned there might well be given to the State Board of Insanity a greater latitude in decision as to autopsy in cases of doubt. Since the establishment of the service there has been at least one clear instance in which the medical examiner had decided to release the case from suspicion in which autopsy disclosed evidence of injury warranting medicolegal examination; in fact, in the case in question, legal procedure was resorted to in an endeavor to convict the attendants concerned with the patient before his death.

Limiting analyses to the autopsied cases, it is clear, then, that 32 out of 152 cases were of a medicolegal nature; the remainder, 120 cases, represent investigations of different and even wider scope, namely, into the causes of death in special cases and into the nature and results of mental disease and defect.

The following table gives data concerning sudden deaths reported to the Board: —

Sudden deaths reported to Board,	85
Number autopsied,	48
Number of autopsies by service,	32
Found dead,	26
Complicated by fractures,	16
Choked by food,	3
Suicides,	5
Homicides,	4
Burns,	1
Probable cerebral hemorrhages,	4
Organic heart disease,	13
Deaths in general paresis or tabes,	6
Miscellaneous and unknown,	15
Epilepsy and asphyxia,	6
Acute infection,	14
Arteriosclerosis and coronary disease,	12

The following table shows the general status of laboratory equipments in the different institutions: —

Hospitals.	Brine Cold Chambers.	Autopsy Tools.	Autopsy Room.	Workrooms.[1]	Photomicrographic Room.	Special Chemical Equipment.	Special Bacteriological Equipment.
Worcester Hospital,	-	Yes	Yes	5	Yes	Yes	Yes
Taunton Hospital,	-	Yes	Yes	4	-	-	-
Northampton Hospital,	-	Few	Yes	2	-	-	-
Danvers Hospital,	Yes	Yes	Yes	5	Yes	Yes	Yes
Westborough Hospital,	-	Yes	Yes	5	Yes	-	Yes
Boston Hospital,	-	Yes	Yes	2	-	-	Yes
Psychopathic Department,	Yes	Yes	Yes	5	Yes	Yes	Yes
Grafton Hospital,	-	-	-	1	-	-	-
Medfield Hospital,	Yes	Yes	Yes	2	-	-	-
Gardner Colony,	-	-	-	-	-	-	-
State Infirmary, Mental Wards,	Yes	Yes	Yes	-	-	Yes	Yes
Bridgewater Hospital,	Yes	Yes	Yes	1	-	-	-
Monson Hospital,	-	Yes	Yes	3	-	-	Yes
Foxborough Hospital,	-	Yes	Yes	2	-	-	-
Massachusetts School for the Feeble-minded, at Waltham.	-	Yes	-	-	-	-	-

[1] Inclusive.

III. Routine of the Pathological Service: Casualties.

Last year for the first time the casualties of the institutions were presented in tabular form. During the year a considerable advance has been made in the method of analysis of the casualties. The reports of the casualties as they reach the State Board are handled in the usual way by individual inquiry, having in mind the special exigencies of each situation. At the end of the year, however, the total casualty record is analyzed by the pathological service by means of its "Analytical Chart of Casualties in Institutions" (Chart G) of the pathological service. These charts contain three headings: statistical, "nature and severity" and "manner of injury." The results of the analysis are presented in the accompanying tables.

Casualty Table A.

Casualties arranged by Institutions.

Institution.	Males.	Females.	Total Number of Patients.	Total Number of Accidents.	Average Attendance.			Average Number of Officers and Employees.		
					Males.	Females.	Totals.	Males.	Females.	Totals.
Worcester Hospital,	18	5	23	23	724	701	1,425	182	187	369
Taunton Hospital,	26	11	37	37	670	567	1,237	152	152	304
Northampton Hospital,	5	2	7	8	479	441	920	100	80	180
Danvers Hospital,	26	24	50	53	653	843	1,496	167	150	317
Westborough Hospital,	15	7	22	22	531	695	1,226	180	172	352
Boston Hospital,	9	12	21	21	644	815	1,459	146	189	335
Psychopathic Department, Boston Hospital,	26	11	37	37	45	47	92	50	77	127
Grafton Hospital,	7	8	15	15	681	800	1,481	184	169	353
Medfield Hospital,	15	20	35	35	645	980	1,625	179	207	386
Gardner Colony,	3	5	8	8	462	277	739	82	57	139
Foxborough Hospital,	4	-	4	4	244	67	34	73	26	99
Mental Wards, State Infirmary,	3	6	9	10	191	518	709	-	-	-
Massachusetts School for the Feeble-minded,	10	2	12	12	999	612	1,611	85	205	290
Wrentham School,	2	3	5	5	279	379	658	30	81	111
Bridgewater Hospital,	2	-	2	2	812	-	812	-	-	-
Monson Hospital,	10	14	24	24	495	489	984	104	104	208
McLean Hospital,	1	-	1	1	82	127	209	-	-	352
Arlington Health Resort,	1	-	1	1	-	-	45	-	-	65
Herbert Hall Hospital,	1	-	1	1	5	13	18	-	-	16
Pine Terrace,	1	-	1	1	-	-	2	-	-	3
Totals,	185	130	315	320	-	-	-	-	-	-

Casualty Table B.

Casualties arranged by Institutions and by Severity of Injury.

	Fractures.	Dislocations.	Gunshot.	Other Severe Injuries.	Total Severe Injuries.	Less Severe Injuries.
Receiving Institutions.						
Worcester Hospital,	13	1	–	1	15	9
Taunton Hospital,	7	1	–	4	12	30
Northampton Hospital,	3	1	–	2	6	3
Danvers Hospital (53 injuries to 50 patients),	11	2	–	2	15	36
Westborough Hospital,	12	–	–	2	14	6
Boston Hospital: —						
Main Department,	12	1	–	–	13	9
Psychopathic Department,	6	2	–	–	8	28
Institutions chiefly for Transfers.						
Grafton Hospital,	9	3	–	–	12	4
Medfield Hospital,	17	1	–	2	20	18
Gardner Colony,	7	–	–	–	7	1
Foxborough Hospital,	4	–	–	–	4	–
State Infirmary, Mental Wards (9 accidents to 8 patients),	7	1	–	–	8	2
Institutions for the Feeble-minded.						
Massachusetts School,	10	1	–	–	11	2
Wrentham School,	4	1	–	–	5	1
Special Public Institutions.						
Bridgewater Hospital,	1	–	–	–	1	1
Monson Hospital,	14	4	–	3	21	3
Special Private Institutions.						
McLean Hospital,	–	–	–	–	–	1
Arlington Health Resort,	1	–	–	–	1	1
Herbert Hall Hospital,	1	–	–	–	1	–
Pine Terrace,	–	–	–	–	–	1
Totals,	139	19	–	16	174	156

CASUALTY TABLE C.

Manner of Injury.

	Psychopathic Hospital.	Grafton State Hospital.	Medfield State Hospital.	Gardner State Colony.	Mental Wards, State Infirmary.	Bridgewater State Hospital.	Monson State Hospital.	Massachusetts School for the Feeble-minded.	Wrentham State School.	McLean Hospital.	Arlington Health Resort.	Herbert Hall Hospital.	Pine Terrace.	Foxborough State Hospital.	Worcester State Hospital.	Taunton State Hospital.	Northampton State Hospital.	Danvers State Hospital.	Westborough State Hospital.	Boston State Hospital.
Unknown,	7	4	2	1				1	1							3	1	1	4	1
Medical accidents,								[1]		1								1		3
Suicidal,								[1]												1
Homicidal,										1							1	1		
Self-mutilation,																		1		
Sex-assault,						1										2	1			1
Other motivated act,			5	1		1				1	1					2	1	12	1	3
Impulsive act,														1	1	2	1	3		2
Reaction to hallucination,	9			1																
Psychomotor excitement,	2																			
Motor restlessness,	1													1						
Paralysis,														1						
Arteriosclerotic seizure,														3						
Ataxia,	1	1					1				1							1	1	2
Muscular weakness,																		3		1
Sense defect,															1			4		
Paretic seizure,	1		4				10	1							1	2		3		
Epileptic seizure,		1					2	1							1					
Epileptiform seizure,							1	1												
Seizure of other nature,																1				
Habitual dislocation,		1																1		
Asocial acts,						1									2	1		14	1	3
Of another patient,		4	14	1		1								1	2	12	1	3	1	1
Of attendant,		1	5		2										1	6		4	1	1
Scuffle of patients,	5					1								1	4			4	1	
Scuffle with attendant, male,															2			2		
Scuffle with attendant, female,	2																	2		
Self-defense,														1		1		2		
Retaliation,																				
Occupational: —																				
Farming,			1															2		1
Other,	6	6	9	6	7		13	8	4	1	1	1	1	3	14	7	2	11	10	8
Unavoidable natural causes,																				

[1] Fall.

As a result of our careful analysis of casualties for 1914 and 1915, and particularly in view of the details of the chart analysis for 1915, the following recommendations may be made.

In addition to the data now forwarded to the State Board, the following items might well be added: —

(*a*) *Duration of Hospital Residence from Admission to Time of Accident.* — This datum throws light on the degree of familiarity with the patient's ways and tendencies which the hospital officers should possess.

(*b*) *Mental Diagnosis.* — This often throws light upon possible motives, impulses and reactions which the patients or attendants may have shown.

(*c*) *Patient's Physique.* — Adequate notes as to the musculature, build and strength of the patient are often omitted from routine reports, and loss of time ensues in subsequent inquiry.

(*d*) *Proportion of Nurses to Patients.* — Not only is it important to know the proportion of nurses to patients in the ward or building where the accident occurred, at the time of the accident, but it is also important to know what has been the proportion of nurses to patients in the ward or building for the week, fortnight or longer before the time of the accident. It is clear that some wards may be undermanned, and it would seem that the incidence of casualties in an institution might show where a numerical or qualitative improvement in the service was indicated.

The pathological service has made an endeavor to divide the casualties into a group avoidable with reasonable care with the service maintained at its actual standard, and a group avoidable by an increase of the nursing force or improvement in its quality. The judgment between these two groups is naturally difficult, and sometimes the more difficult when the report of the casualty is presented with entire objectivity in the sense that only those facts are written out which are the result of direct evidence. It is clear that circumstantial or hearsay evidence may have cumulative weight in decision as to the avoidability or non-avoidability of casualties. It is possible, therefore, that it might augment hospital efficiency if the officers reporting casualties were required themselves to make a judgment as to whether the casualty was "avoidable with reasonable care" or "avoidable with more or better nurses." The service has been able to secure some data in this direction by the objective record as to reprimands, discharges, arrests, recommendations of change of internal policy and actual execution of such changes of policy.

The service proposes to write out an analysis of these matters from the efficiency standpoint, for publication in a medical journal, as soon as sufficient evidence has been accumulated under the present system of analysis.

Last year the total number of casualties reported to the State Board was 346, of which 4 were accidents affecting attendants and not patients. This year 313 have been reported, namely, 33 less than in 1914. The question how far this decrease represents an improvement in the general condition of patients in the institutions is hard to answer on account of the possibility of a variation in the standard of reporting. However, on the whole there is no doubt that there has been an increase of interest in casualties in the State service, and that an endeavor has been made to report all accidents and even incidents which could be regarded as of a suspicious nature and as bearing on the welfare of the patients. The State Board has occasionally called the attention of institutions to needless reports made by them.

Probably a much safer index of the general condition of the patients in the institutions will be afforded by a comparison of the number of severe injuries. The question how severe a minor injury must be to warrant a report to the State Board may be a difficult one to settle, but the occurrence of fractures, dislocations and other major injuries is in all instances reported to the Board.

IV. Investigations.

The investigative function of the pathological service may be said to execute the provisions of section 6, chapter 504, Acts of 1909, which section reads in part as follows: "The board shall encourage scientific investigation by the medical staffs of the various institutions under its supervision, shall publish from time to time bulletins and reports of the scientific and clinical work done therein, . . ."

Since 1911 the State Board's estimates have regularly included an estimate of $2,500 for investigation as to the nature, causes, results and treatment of mental disease and defect and for the publication of the results thereof. A portion of this fund is expended in connection with the autopsy and other routine work mentioned above. The remainder is expended for general purposes of investigation. No attempt will be made in this report to give a comprehensive account of the investigations

undertaken, the general nature of which can be seen from the list of publications given below in Section VI. of this report.

The monthly reports of the Bulletins published by the State Board include brief statements as to the researches being carried out from time to time.

An important part of the investigative work of the service is not far removed from routine, namely, the hygienic investigations rendered desirable by the occurrence of epidemics and special cases of infectious disease. From time to time the resources of the service have been lent to laboratories of the State institutions whose officers were being overwhelmed by the amount of testing rendered necessary by some epidemic or threatened epidemic. Among the hygienic problems of the year may be mentioned typhoid fever carrier work; Riggs' disease; infectious diarrhea; lobar pneumonia; phthisis; jaundice; secondary bacteriological invaders in pellagra and bacteriology of "soft brain" cases.

A curious finding was the discovery that one of the cases of bacillary dysentery, proved such by culture in the dysentery epidemic at the Danvers State Hospital in 1910, has proved histologically to be *also* a case of amœbic dysentery, very possibly the first case reported from Massachusetts State institutions.

Notes concerning other hygienic work in the institutions will be found in the excerpts from the reports of institutions given below.

The recent extension of the service of the State Department of Health, and its offer to give expert service in epidemics and other public health difficulties within the institutions under the control of the State Board of Insanity, will prove of advantage to the institutions. From the beginning of his work the pathologist to the State Board of Insanity has recommended that the institutions build up their laboratories around a "hygienic nucleus." This idea still remains a proper ideal, even with the extension of the pathological service of the Board of Insanity and the help offered by the Department of Health. Attention is called below to the assumption of the Wassermann service by the State Department of Health.

Aside from hygienic activities, the investigations of the pathological service have to do with psychiatric problems. Here, too, the problems often grow very directly out of the routine of the institutions. The importance of the syphilis fraction of our

institutional intake of patients can hardly be overestimated. Possibly a fifth of the patients entering institutions for the first time are syphilitic, although their mental symptoms are not in all cases due to the syphilis. The clinical questions brought up by syphilis require constant control by autopsy investigations. The work with syphilis is considered in a separate section.

As in previous years, much study has been made of normal-looking brains in psychopathic subjects. The point of this study has been to deal with the neglected material of so-called functional or "quasi functional" psychoses. The occurrence of internal hydrocephalus of mild or even severe degree in a certain proportion of these functional psychoses has been proved from this year's work. Another conclusion of general interest is that whereas about four out of five of the brains of the victims of dementia præcox show a variety of lesions and anomalies, the same proportion of brains of manic-depressive subjects fail to show lesions or anomalies judged by the same criteria. This may possibly mean that dementia præcox is a disease in which there is congenital or acquired disease of the nervous system (one hypothesis being that there are "weak places" in the nervous system from birth which are sooner or later the subject of lesion as a result of unknown *intra vitam* factors). On the other hand, it may be that manic-depressive psychosis is one in which the causes lodge outside the nervous system, or in which the disease is a submicroscopic and reversible condition of the nervous system.

A somewhat important detail discovered was that by Dr. E. W. Fell, of fatty changes in the cerebellum, notably, in the Purkinje cell belt in certain toxic psychoses. The fact that the Purkinje cell belt was thus proved to be a region of lesser resistance in acute disease (control cases in chronic disease fail to show the changes) is of importance in connection with the claims by Crile as to the effects upon the Purkinje cells in shock.

A special study of two cases of angular gyrus lesion associated with catatonia has been made.

Considerable work has been done upon the anatomy of feeble-mindedness, which the following brief extract from a presentation at a medical meeting will represent: —

Dr. Southard presented an account of the first installment of work on the brains of the feeble-minded done under the auspices of the Massachusetts School for the Feeble-minded. He called attention to the extraor-

dinarily small amount of work which has been done upon the anatomy of brains of feeble-mindedness, speaking of the work of Bourneville, Hammarberg, and the early work of Wilmarth in this country. He spoke of the present as an auspicious period for work in this field on account of the great achievements in cortex topography of recent years. He described the systematic photography of the brains from above, below, from the two sides and from the two mesial aspects, and the further photography of frontal sections. Thereupon microscopic work would be done with the full advantage of correlations with the gross appearance, such as anomalies, atrophies and other focal lesions.

Another reason for working eagerly at this topic at this time was the fact that mental tests are now available, so that we can compare —

(*a*) The psychometric level of the patient.

(*b*) The functional level of the patient as exhibited clinically and educationally.

(*c*) The level of brain development.

The speaker insisted upon the importance of studying efficiency in the material of feeble-mindedness. He considered that feeble-mindedness forms the best material now available for research in efficiency, and called attention to the fact that all the modern books upon efficiency had neglected the field. Just as the Montessori method was a logical descendant of the work of Séguin, so new ideas in the education of the normal derive from the more modern work in the education of the feeble-minded.

If correlations between the psychometric and practical capacity levels of the patients on the one hand, and the trained brains on the other, can be made, then possibly something new concerning the nature of work in this connection and comparison between appearances in the parietal lobes and those in the frontal lobes would obviously be of importance.

Some progress in a similar direction has been made upon the brains of certain executed criminals, the property of the medical examiner of Suffolk County, Dr. G. B. Magrath.

Considerable time has been spent on correlations between delusions and delusional tendencies of different types and brain findings.

A method of estimating convolutional complexity has been devised and is to be published in the transactions of the Second Pan American Scientific Congress.

In collaboration with Monson State Hospital, some work on the anatomy of the brain in organic and idiopathic epilepsy has been published.

During the year publication will be begun of a mass of work involving brain photography. The collection of the brain photographs of the State Board of Insanity is probably unrivaled,

consisting at present of systematic views of several aspects of over 600 carefully selected brains from cases whose histories are on record.

The titles of the publications listed below include numerous psychological and sociological subjects; in several cases the work has been aided by the appropriation of small sums from the State Board's appropriation for investigation.

The scientific work of the pathological service and of the Psychopathic Hospital as an investigation station of the State Board of Insanity, here presented in the briefest way, can best be understood by a study of the scientific contributions of the State Board of Insanity as listed below.

V. Initiation of the Brain Syphilis Branch of the Pathological Service.

Although the special investigator in brain syphilis, Dr. Harry C. Solomon, was not appointed until Nov. 15, 1915, and only two weeks of his State Board service followed within the limits of this report, it is important to state here the main lines of the proposed investigation.

The appointment of Dr. Solomon was made on the basis of the general desirability of a systematic investigation of the effects of a variety of treatments of brain syphilis in unselected material. Dr. Solomon had been specializing upon this work for many months while on service as assistant physician at the Psychopathic Hospital. The initial results of the diagnostic and therapeutic work in this direction were presented at the Psychopathic Hospital in a conference on brain syphilis held May 27, 1915. By the application of the Lange Gold Sol method to a considerable amount of autopsy material, a new point had been made by Dr. Solomon which may be summarized by stating that different parts of the same nervous system clearly showed chemical differences (Gold Sol index). The acceptance of these differences gave rise to the hope that pertinacious treatment might eventually reach places not at first reached, and that the curve of the results of treatment might not be a regular one even in a given case. Besides this and other theoretical points, the practical application of salvarsan in some form involving intravenous injections seemed clearly to demonstrate surprisingly good results in unselected material.

The purpose of the State Board of Insanity in making the

Chicago School of Civics and Philanthropy

appointment of a special investigator may be indicated as follows: —

(*a*) It was proposed to treat intensively approximately 100 cases of various forms of syphilis of the central nervous system, controlling the treatments in a variety of ways.

(*b*) It was the especial aim of the Board to have work done upon the relationship of syphilis to feeble-mindedness and to epilepsy, since not only the literature but also the out-patient department of the Psychopathic Hospital indicated a higher percentage of syphilis in these forms of defect than had ever formerly been suspected by physicians.

(*c*) The State Board desired the stimulation of work in the various institutions upon the diagnosis of brain syphilis, with a view to family studies and efforts at prevention.

An important group of cases is the group of latent brain syphilis. Some cases, from the details of their laboratory tests, seemed actually to warrant the diagnosis paresis *sine paresi*, which is the title given to them in a communication already published. It seems that the existence may be plainly demonstrated of cases without mental symptoms and without symptoms of involvement of the nervous system in any respect which, nevertheless, showed a chronic inflammation of the membranes of the nervous system and all the classical chemical and immunological features of the spinal fluid. It is to be wondered whether these cases are actually as few as they might seem to be. There is ordinarily no reason for their discovery, since persons without symptoms are never subjected to lumbar puncture. The discovery of these cases was made when it was found by routine procedure that the blood was positive by the Wassermann reaction. Following Kraepelin's dictum, and the opinion of the best psychiatrists of the day, most of the institutions of the State at present follow the practice of routine Wassermann blood examinations in all cases of mental disease. This practice has been rewarded by the discovery of numerous cases of syphilis which would otherwise have gone untreated.

The scientific world has not proceeded to the point as yet of insisting upon lumbar puncture in all cases of mental disease, but only in cases with a positive blood reaction by the Wassermann method, or in cases which for other reasons look "organic." (It would seem, for example, desirable to exclude syphilis as a diagnosis from all cases in which brain tumor is a prominent diagnosis.)

When this report goes to press, special work in brain syphilis work will have been started in nine institutions. Work will be started in others later. The work of the State Board is intended to be entirely co-operative and initiative, but in several institutions, notably in Monson State Hospital, intensive work has already been started. In several of the institutions, for a variety of reasons, no use had been made of the Wassermann reaction except in the most infrequent instances. The establishment of several Wassermann laboratories in the State, and notably that of the oldest Wassermann laboratory in the State, namely, the Harvard Neuropathological Testing Laboratory, did not permit several of the remoter and less well manned and equipped institutions to improve the opportunity of Wassermann reactions, particularly as the fees, although in several instances low or at cost, seemed prohibitive.

Now, however, the State Department of Health has been able to take over the work of Wassermann examinations for the institutions of the State, and, under certain restrictions, for all the physicians of the State.

It is planned to issue quarterly reports in the Bulletin of the work done in this investigation.

VI. Excerpts from Annual Reports of Institutions.

Worcester State Hospital.

The superintendent speaks of the cessation of dysentery, the occurrence of pellagra, the removal of epileptics from Worcester to specified institutions ("concentrated where more intensive methods of study and treatment can be applied"), extensive dental work in the institution and the securing of Dr. H. I. Gosline as pathologist.

Taunton State Hospital.

The superintendent speaks of the frequency of pneumonia, special work in fitting cases with glasses, and special dental work (Riggs' disease).

Northampton State Hospital.

The superintendent states that 10 cases of pellagra have been admitted to this hospital in the last four years. The four women admitted this year had all had symptoms outside the institutions from six months to eighteen years before admission.

Danvers State Hospital.

The superintendent's report is medically elaborate, and of interest. It refers to staff meetings, the occurrence of pellagra, social service (desirability of five workers), out-patient clinic work, occupational therapy, autopsy work (99 cases) and hog cholera (immunizing now handled by Department of Animal Industry).

The report of the pathologist, Lawson G. Lowrey, M.D., describes the maintenance of long-established laboratory routine. Following is a table of the results of Wassermann blood tests: —

	Males.		Females.		Totals.	
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Cases tested, . . .	352	-	285	-	637	-
Wassermann positive, .	58	16.47	29	10.17	87	13.66
Wassermann negative, .	286	81.25	251	88.08	537	84.30
Wassermann doubtful, .	8	2.28	5	1.75	13	2.04

Probably the most important and most significant event of the year was the conference held at the hospital on the 19th of November to celebrate the twentieth anniversary of the establishment of the laboratory on its modern basis with a full-time pathologist in charge. The event was also made a tribute to William Leonard Worcester, the first pathologist under the new régime. With few exceptions, all of the men who had worked in the laboratory and all of the ex-superintendents were present and took part in the program. The program is too long to reproduce here, but it is expected that early in the coming year all of the articles will be published in the form of a single volume as the "William Leonard Worcester Series of Danvers State Hospital Papers."

The following list of papers represents the contributions from this hospital for the past year: —

LII. "Prognosis in Manic-depressive Insanity." Dr. J. B. Macdonald. (Read before the Society of Alienists and Neurologists at Chicago, July 18, 1915.)

LIV. "Anatomical Findings in the Brains of Manic-depressive Subjects." Dr. E. E. Southard. Transactions, American Medico-Psychological Association, 1914.

LV. "Emetine Hydrochloride in the Treatment of Pyorrhœa." Dr. H. I. Gosline. Boston Medical and Surgical Journal, 1915. (Read at a meeting of the New England Society of Psychiatry, 1915.)

LVI. "Study of 57 Cases diagnosed Paresis in pre-Wassermann Days." Dr. L. G. Lowrey. Journal of Nervous and Mental Diseases, 1915–16. (Read at a meeting of the New England Society of Psychiatry, 1915.)

LVII. "Data concerning Delusions of Personality." Dr. E. E. Southard. Journal of Abnormal Psychology, Vol. X., pp. 241–262.

LVIII. "The Community Value of the Out-patient Service of Insane Hospitals." Dr. J. B. Macdonald. Proceedings, Mental Hygiene Conference, Boston, 1915.

LIX. "Anomaly of the Circle of Willis, due to Absence of the Right Internal Carotid Artery." Dr. L. G. Lowrey. Proceedings, American Association of Anatomists, 1915.

LX. "The Wassermann Test in Psychiatric Practice: An Analysis of 1,600 Admissions." Dr. L. G. Lowrey. Submitted to the American Journal of Insanity.

Westborough State Hospital.

The superintendent notes that during the past year they have had resident twenty senior students from Boston University School of Medicine, each remaining at least five weeks, one staying two months during the summer. They hope and believe that this has been beneficial to the student, and they know that it has been a stimulus to each member of the staff. This work is a recognized undergraduate course at the Boston University School of Medicine, and in connection with this they have arranged a postgraduate course of three months, which has also been recognized by the State Board of Insanity as a training course for applicants for the position of assistant physician in this hospital.

The pathologist reports increased co-operation between ward and laboratory efforts, routine Wassermann tests, and investigation of the effects of the Byrnes mercurialized serum method in cerebrospinal syphilis.

Boston State Hospital.

The superintendent notes an epidemic of dysentery (78 cases, 8 deaths) due to an organism related to the hog cholera group (Mary E. Morse, pathologist). Prophylactic immunization of

the patients is under way. Search for typhoid carriers is being carried out, with the assistance of the State Department of Health. Work on brain syphilis treatment has been started in co-operation with the State Board of Insanity. One of the clinicians, Dr. Geneva Tryon, is pursuing special laboratory studies.

Grafton State Hospital.

The superintendent notes a typhoid epidemic (25 cases), routine Wassermann examinations and the admission of 123 epileptic cases. Special reports of clinical groups, following the plan of the Danvers Hospital annual report, are printed.

Medfield State Hospital.

The superintendent states that a pathological laboratory has been under consideration for the past two years. If this were erected they could supply an abundance of material for scientific study as well as make more certain their diagnoses of acute diseases, which are constantly occurring among the patients.

The State Board of Insanity has continued to furnish the services of a skilled pathologist, and hospital authorities have availed themselves of Dr. Canavan's skill and knowledge whenever permission for an autopsy could be obtained from the friends of patients.

Monson State Hospital.

The superintendent's report states, relative to the pathological department: —

The work in a laboratory connected with a State institution of this kind naturally divides itself into two divisions: first, the clinico-pathological; second, that of an experimental or research character.

The clinico-pathological work has increased constantly since the opening of the new laboratory, and can be divided into three groups, — the chemical, bacteriological and serological.

The examination of the blood and urine is done routinely on every new patient. The spinal fluid is examined in those cases with a positive Wassermann, or cases showing symptoms of organic brain diseases. Gastric analysis and microscopic examination of sputums aid materially in making a diagnosis in many cases, while vaccines are prepared and employed in suitable cases.

Dr. Hodskins has work under way which may reveal some interesting changes in the urinary findings in certain cases following convulsions.

He is also employing the typhoid vaccine as a preventive measure, using the vaccine on all employees connected with the preparation or serving of food.

The publications that have been sent out from the laboratory since Dec. 1, 1914, are as follows: —

1. "The Present Status of Crotalin in the Treatment of Epilepsy." D. A. Thom, M.D.
2. "A Study of Normal-looking Brains in Epileptics." E. E. Southard, M.D., and D. A. Thom, M.D.
3. "The Relation between the Genetic Factors and the Age of Onset of One Hundred Fifty-seven Cases of Idiopathic Epilepsy." D. A. Thom, M.D.
4. "Abnormal Relation between Liver and Brain Weights in Forty-two Autopsied Cases of Epilepsy." D. A. Thom, M.D.
5. "Epilepsy in the Offspring of Epileptics." D. A. Thom, M.D.
6. "Body Types in Epileptics." Morgan B. Hodskins, M.D.

Paper No. 2 was presented at the meeting of the National Association for the Study of Epilepsy, held at Old Point Comfort May 10, 1915. Paper No. 5 was presented at the meeting of the New England Society of Psychiatry, held Sept. 28, 1915, at Waverley, Mass.

In the spring the pathologist spent nearly three weeks at Dr. Mallory's laboratory, Boston City Hospital, studying general pathology.

The work outlined for the ensuing year will consist of the microscopic examination of the normal-looking brains, which was the foundation for study No. 4. Further investigation will be made of the mental defects found in the offspring of a large group of cases whose epilepsy has brought them under the care of the Monson State Hospital.

In association with Dr. E. E. Southard, papers are under way on the subject of "Epileptic Dementia" and "The Frequentative Factors in Epilepsy."

Massachusetts School for the Feeble-minded.

The trustees speak of the importance of research, and the superintendent writes as follows: —

Research. — For several years past the small income of our private funds has been used for scientific research along various lines. A careful psychological examination is made of each patient admitted, with re-examination from time to time of the older patients.

For three years the eugenics field workers have been studying the antecedents of the patients. A special study has been made of the Mongolian type of idiocy, with special reference to heredity. This study has been completed, and is now ready for publication. A similar inquiry is now under way regarding the antecedents of patients showing mental defect with spastic paralysis.

The intensive pathological studies of diseased brain conditions in mental defect are being continued at the neuropathological laboratory of the

Harvard Medical School. The study of the first 10 cases is now being prepared for publication.

Wassermann reactions have now been made of practically all our patients. The results of this inquiry indicate that over 6 per cent. of our patients have congenital syphilis.

Wrentham State School.

The superintendent speaks of an epidemic of grippe and pneumonia during the winter.

State Infirmary.

The superintendent's report shows that the long-desired laboratory is under way, with Dr. Rudolf Kohn as pathologist. Most of the work done, naturally, has far more relation to general hospital problems than to psychiatry. The hospital is a center of syphilitic material.

McLean Hospital.

The superintendent states: —

No chemist has yet been appointed, but it is hoped that one may be found capable of serological investigations of value. An indifferent appointment would be worse than none. . . . Laboratory investigation is a legitimate field of hospital activity. . . . A hospital that is not trying to do some research work is in the ruts of bygone days. . . . Our small fund of $5,000 should be increased to at least $200,000 to yield an income sufficient to finance the work which the hospital ought to do.

In the psychological laboratory the original apparatus completed last year has been in very satisfactory use, though improvements are being introduced in the construction of further models desired by another institution. The electrically driven multiple pen recorder and the variable selective chronograph, being built especially for the laboratory, were economically purchased in a nearly completed state with much other accessory apparatus. The experimental problems have been those of choice reactions according to the lines indicated in the last report. The aim is for measures of mental stability that shall be independent of 'intelligence.' Thus far the results are favorable, but the number of cases is not yet large enough for generalization.

While more laboratory work was done this year than during any year since the laboratory has been under the present direction, the widening field of psychopathology makes it increasingly difficult to give sufficient time to the laboratory problems, especially in view of its important developments outside the laboratory. The facilities of the hospital

laboratory are now far from completely utilized, and the department could not fully utilize them without neglecting every other aspect of its work. Some technical assistance was obtained during the past year, and upon the continuance of this depends the most efficient conduct of the laboratory work of the department.

VII. Scientific Publications of the State Board of Insanity and of the Institutions under its Control.

The efficiency of the scientific work of the institutions has been increased in recent years by the systematic listing and enumeration of the scientific publications of the institutions under control of the State Board of Insanity, and of the scientific services maintained by said Board. An almost negligible fraction (far less than 1 per cent.) of the expenses of the institutions can be laid at the door of scientific publications; yet those who are in the current of progress in the treatment of mental disease know how much of Massachusetts' standing among her sister States depends upon the appearance of her officers at association meetings and upon the subsequent publication of the work presented.

Previous reports have listed the publications through 1914 of (*a*) the State Board, (*b*) the Psychopathic Hospital and (*c*) the institutions. The publications of (*a*) and (*b*) have been listed in accession series since 1913, and these lists were kept separate until the middle of 1915, when, by concurrent votes of the State Board of Insanity and the Board of Trustees of the Boston State Hospital, arrangements were made for the fusion of the two series thereafter. The following table shows the number of such papers before combination of the series: —

State Board of Insanity

Contributions 1–20 (1913.1–1913.20), ...	20	
Contributions 21–34 (1914.1–1914.14), ...	14	
Contributions 35–47 (1915.1–1915.13), ...	13	
	—	47

Psychopathic Department, Boston State Hospital.

Contributions 1–34 (1913.1–1913.34), ...	34	
Contributions 35–63 (1914.1–1914.29), ...	29	
Contributions 64–69 (1915.1–1915.6), ...	6	
	—	69
		116

For the combined series the first new *whole number*, therefore, is 117, and the first *year number* (corresponding to 117) is 1915.20 (obtained by adding S. B. I. 1915.1–1915.13 and Psychopathic Hospital 1915.1–1915.6-19). The list given below accordingly begins with whole number 117 (1915.20).

The vote of the State Board was still more inclusive, arranging for the inclusion of all titles of articles and reports (other than public documents) made by institution officers, based upon institution material. The choice of papers from all three sources, (*a*) scientific services of State Board, (*b*) Psychopathic Hospital, and (*c*) State institutions, for reprinting in a volume representative of Massachusetts work, was placed in the hands of a committee composed of Drs. Michael J. O'Meara, L. Vernon Briggs, Walter E. Fernald, George M. Kline and Elmer E. Southard.

Following is a complete list, so far as available from reports from all sources, of publications of 1915 (for convenience the calendar year is adopted as basis): —

STATE BOARD OF INSANITY CONTRIBUTIONS, 1915.

S. B. I. 35. 1915.1. "A Study of Normal Looking Brains in Psychopathic Subjects." Third note (Boston State Hospital material). Published in Boston Medical and Surgical Journal, Jan. 28, 1915.

S. B. I. 36. 1915.2. "Anatomical Findings in the Brains of Manic-depressive Subjects." Submitted to American Journal of Insanity. Reprinted from Proceedings of American Medico-Psychological Association, Baltimore, May 26–29, 1915.

S. B. I. 37. 1915.3. "A Histological Study of the Optic Nerves in a Random Series of Insane Hospital Cases." M. M. Canavan. Submitted to Journal of Nervous and Mental Diseases.

S. B. I. 38. 1915.4. "A Comparison of the Mental Symptoms found in Cases of General Paresis with and without Coarse Brain Atrophy." E. E. Southard. Submitted to Journal of Nervous and Mental Diseases.

S. B. I. 39. 1915.5. "On the Value of the Gold Sol Test (Lange) with Spinal Fluids obtained Post Mortem." H. C. Solomon and E. S. Welles. Published in Boston Medical and Surgical Journal, March 18, 1915.

S. B. I. 40. 1915.6. "Varieties of the Gold Sol Test (Lange) in Several Loci of the Cerebrospinal Fluid System: A Study of Twenty-eight Autopsied Cases." H. C. Solomon and E. S. Welles. Published in Boston Medical and Surgical Journal, April 29, 1915.

S. B. I. 41. 1915.7. "Program and Directions for the Mental Examination of Asocial, Psychopathic and Doubtful Subjects." Rose S. Hardwick. Published in Boston Medical and Surgical Journal, June 3, 10, 17 and 24, 1915.

S. B. I. 42. 1915.8. "On the Direction of Research as to the Analysis of Cortical Stigmata and Focal Lesions in Certain Psychoses." E. E. Southard. Published in Transactions of the Association of American Physicians, Vol. XXIX., 1914.

S. B. I. 43. 1915.9. "Note on Recent Extension of Out-Patient Work in Massachusetts Hospitals for the Insane." L. Vernon Briggs and A. Warren Stearns. Published in Boston Medical and Surgical Journal, April 15, 1915.

S. B. I. 44. 1915.10. "A Survey of Defective Delinquents under the Care of the Massachusetts State Board of Insanity." A. Warren Stearns. Submitted to American Journal of Insanity.

S. B. I. 45. 1915.11. "Notes on the Relation of Somatic (Non-Neural) Neoplasms to Mental Disease." E. E. Southard and M. M. Canavan. Published in the Interstate Medical Journal, July, 1915.

S. B. I. 46. 1915.12. "An Anatomical Research for Idiopathic Epilepsy; being a First Note on Idiopathic Epilepsy at Monson State Hospital, Massachusetts." D. A. Thom and E. E. Southard. Published in Review of Neurology and Psychiatry, October, 1915.

S. B. I. 47. 1915.13. "Data concerning Delusions of Personality, with Note on the Association of Bright's Disease and Unpleasant Delusions," to be published in Transactions of Sixth Annual Meeting of American Psychopathological Association, held in New York City, May 5, 1915. E. E. Southard. Published in Journal of Abnormal Psychology, Vol. X., October-November, 1915.

PSYCHOPATHIC DEPARTMENT CONTRIBUTIONS, 1915.

P. H. 64. 1915.1. "Occurrence of Hallucinosis in Five Hundred Cases of Mental Disease." A. Warren Stearns. Published in Journal of Nervous and Mental Diseases, January, 1915.

P. H. 65. 1915.2. "The Importance of Social Status as indicated by the Results of the Point Scale Method of measuring Mental Capacity." R. M. Yerkes and Helen M. Anderson. Published in Journal of Educational Psychology, March, 1915.

P. H. 66. 1915.3. "The Carnivorous and Herbivorous Types in Man: The Possibility and Utility of their Recognition." John Bryant. Published in Boston Medical and Surgical Journal, March, 1915.

P. H. 67. 1915.4. "The Somatic Characteristics of General Paretics." Donald Gregg. Published in Boston Medical and Surgical Journal, April 8, 1915.

P. H. 68. 1915.5. "Variations in the Sensory Threshold for Faradic Stimulation in Psychopathic Subjects: II., Manic-depressive Insanity." G. P. Grabfield. Published in Boston Medical and Surgical Journal, Aug. 5, 1915.

P. H. 69. 1915.6. "Variations in the Sensory Threshold for Faradic Stimulation in Psychopathic Subjects: III., The Dementia Præcox Group." G. P. Grabfield. Published in the Boston Medical and Surgical Journal, Aug. 5, 1915.

Whole No. NEW (COMBINED) SERIES.

117. 1915.20. "First Note on the Psychological Study of the Criminals at the Massachusetts State Prison." C. S. Rossy. Published in State Board of Insanity Bulletin, September, 1915.

118. 1915.21. "Comparison of Mental Gradings by the Yerkes-Bridges Point Scale and the Binet-Simon Scale." Submitted to American Journal of Psychology. C. S. Rossy.

119. 1915.22. "Focal Lesions of the Cortex of the Left Angular Gyrus in Two Cases of Late Catatonia." E. E. Southard and M. M. Canavan. Published in American Journal of Insanity, Vol. LXXII., January, 1916.

120. 1915.23. "The Feeble-Minded as Subjects of Research in Efficiency." E. E. Southard. Transactions of National Conference of Charities and Correction, May, 1915.

121. 1915.24. "Advantages of a Pathological Classification of Nerve Cells, with Remarks on Tissue Decomplication as shown in the Cerebral and Cerebellar Cortex." E. E. Southard. Transactions of Association of American Physicians, 1915.

122-131. 1915.25-1915.34. Notes of a Conference on the Medical and Social Aspects of Syphilis of the Nervous System, held at the Psychopathic Hospital, May 27, 1915.

Whole No.

122. 1915.25. "Remarks at Neurosyphilis Conference," by Abner Post. Published in Boston Medical and Surgical Journal, Dec. 9, 1915.

123. 1915.26. "Examination and Prophylaxis for Syphilitic Patients and their Families: Methods of Investigation at the Psychopathic Hospital, Boston, Mass., 1915." Helen M. Wright. Published in Boston Medical and Surgical Journal, Dec. 9, 1915.

124. 1915.27. "Estimate of the Cost of Social Work in Connection with Examination and Treatment of Other Members of Families of Syphilitic Patients throughout the State, based upon One Hundred and Forty-seven Cases dealt with in Eight Months at the Psychopathic Hospital." Mary C. Jarrett. Published in Boston Medical and Surgical Journal, Dec. 16, 1915.

125. 1915.28. "A Few Economic Facts of the Syphilis Problem, from the Psychiatric Side." Donald Gregg. Published in Boston Medical and Surgical Journal, Dec. 16, 1915.

126. 1915.29. "Mental Features of Congenital Syphilitics." J. H. Bazeley and H. M. Anderson. Published in Boston Medical and Surgical Journal, Dec. 23, 1915.

127. 1915.30. "Diagnostic Value of Lange's Gold Sol Test." H. C. Solomon, H. O. Koefod and E. S. Welles. Published in Boston Medical and Surgical Journal, Dec. 23, 1915.

Whole No.

128. 1915.31. "The Significance of Changes in Cellular Content of Cerebrospinal Fluid in Neurosyphilis." H. C. Solomon and H. O. Koefod. Published in Boston Medical and Surgical Journal, Dec. 30, 1915.

129. 1915.32. "Latent Neurosyphilis and the Question of General Paresis *sine Paresi*." E. E. Southard and H. C. Solomon. Published in Boston Medical and Surgical Journal, Jan. 6, 1916.

130. 1915.33. "The Development of the Gold Sol 'Paretic' Reaction as compared with the 'Cerebrospinal Syphilitic' Type, considered from the Time Necessary to form a Completed Reaction." H. C. Solomon and E. S. Welles. Published in Boston Medical and Surgical Journal, Jan. 13, 1916.

131. 1915.34. "Syphilis and the Psychopathic Hospital. Notes on Medical and Social Progress, especially in Neurosyphilis, Boston, Mass., 1915." E. E. Southard. Published in Boston Medical and Surgical Journal, Jan. 13, 1916.

132. 1915.35. "Second Note on a Psychological Study of the Criminals at the Massachusetts State Prison." C. S. Rossy. Published in State Board of Insanity Bulletin, December, 1915.

133. 1915.36. "Physiological Considerations in the Differential Diagnosis of Neurasthenic, Hysterical and Psychotic Symptoms." Donald Gregg. Read Nov. 18, 1915, at Boston Society of Psychiatry and Neurology.

134. 1915.37. "Hysteria as a Weapon in Marital Conflict." A. Myerson. Journal of Abnormal Psychology, May, 1915.

135. 1915.38. "The Conditional Reflex of Pawlow." A. Myerson. Interstate Medical Journal, Vol. XXII., June, 1915.

136. 1915.39. "Emetine Hydrochloride in the Treatment of Pyorrhœa Alveolaris." H. I. Gosline. Boston Medical and Surgical Journal, 1915.

137. 1915.40. "Thalamic Gliosis in Dementia Præcox." Mary E. Morse. American Journal of Insanity, Vol. LXII., July, 1915.

138. 1915.41. "A Study of the Spinal Cord in a Case of Isolated Atrophy of the Small Muscles of the Hands." Mary E. Morse. Journal of Nervous and Mental Disease, Vol. 42, May, 1915.

139. 1915.42 "Occupation of Patients in State Hospitals for Insane." Henry P. Frost. The Modern Hospital, September, 1915.

140. 1915.43. "Alcoholism." Ernest B. Emerson. Boston Medical and Surgical Journal, July 22, 1915.

141. 1915.44. "The Relation between the Age at Onset and the Genetic Factors in One Hundred and Fifty-seven Cases of Epilepsy." D. A. Thom. Submitted to Boston Medical and Surgical Journal.

142. 1915.45. "What is Practicable in the Way of Prevention of Mental Defect?" Walter E. Fernald. Proceedings of National Conference of Charities and Correction, 1915.

VIII. Summary.

A more general statement of the work in investigation is given elsewhere in the report of the State Board under the head of "Progress in Psychiatry (Local)."

1. The director of the Psychopathic Hospital became a salaried officer of the State Board in May, 1915.

2. The routine of the pathological service of the State Board included 152 autopsies, 32 of which were in cases of sudden death.

3. Eighty-five sudden deaths were reported to the State Board, of which 48 resulted in autopsy (32 by the pathological service and 16 by medical examiners or otherwise).

4. Special investigation of brain syphilis and its treatment was inaugurated Nov. 15, 1915 (see Section V.).

5. More intensive analysis of casualties has been made. There were 174 severe accidents in the institutional group during 1915 as against 168 during 1914, a relative decrease considering the number of patients under care. An absolutely as well as relatively far smaller number of minor accidents was reported (156 in 1915 compared with 201 in 1914).

6. Visitation of the institutions in the interest of investigation, diagnosis and treatment has been increased in amount (41 visits by pathologist, 186 by assistant pathologist, 8 by syphilographer, exclusive of visits at the Psychopathic Hospital, which is regarded as the base of operations).

7. A system of circular letters from the pathologist's office to the various institutions has been started, designed to cover special topics of interest or inquiry.

8. The serial numbering of all institutional publications bearing on investigation and propaganda has been begun. The total number of publications for 1915 from the institutions under the control of the Board was 45.

9. Special investigations from the pathological service of the State Board and from the Psychopathic Hospital, regarded as an investigative unit, include —

(*a*) Hygienic problems of local scope (typhoid carriers, Riggs' disease, infectious diarrhœa, lobar pneumonia, phthisis).

(*b*) Bacteriological problems of more general scope (secondary bacterial invaders in pellagra, bacteriology of "soft brains").

(*c*) A case of amœbic dysentery combined with bacillary dysentery (Danvers material).

(*d*) "Normal-looking" brains in functional psychoses.

(*e*) High proportion of anomalies in dementia præcox brains and correspondingly low proportion of anomalies in manic-depressive psychoses.

(*f*) Peculiar fatty changes in cerebellum in toxic psychoses.

(*g*) Angular gyrus lesions in two frankly organic cases clinically resembling dementia præcox.

(*h*) Extensive studies in the brain anatomy of feeble-mindedness.

(*i*) Progress in the examination of brains of executed criminals.

(*j*) Attempt to correlate delusional tendencies with brain lesions variously situated.

(*k*) Method of estimating convolutional complexity.

(*l*) High proportion of optic nerve changes in various psychoses (post-mortem evidence).

(*m*) Estimate of importance of tumors to mental disease.

(*n*) Hallucinosis (statistics).

(*o*) Sensory threshold work (manic-depressive psychosis and dementia præcox).

10. Progress in the institutions, taken separately, is described briefly in Section VI. of this report, and may be summarized as follows: —

(*a*) Increase of practical dental work owing largely to renewed interest in Riggs' disease (Worcester, Taunton, Danvers, Boston, Psychopathic and others, especially hospitals having active pathological officers interested in the amœba question).

(*b*) Maintenance of pathological work at Worcester by appointment of Dr. Harold I. Gosline as pathologist (photographic brain studies, cytology of dementia præcox).

(*c*) Continuation of pathological work at Taunton under Dr. A. Myerson, pathologist (heredity and family studies, histology of sympathetic system in psychoses, staining methods).

(*d*) Continuation of pathological work at Danvers under Dr. Lawson G. Lowrey, pathologist (photographic brain studies showing brain anomalies, preparation of elaborate program of twentieth anniversary of opening Danvers laboratory).

(*e*) Continuation of pathological work at Westborough under Dr. Solomon C. Fuller, pathologist (establishment of routine Wassermann tests; studies with Cajol neuroglia stain).

(*f*) Continuation of pathological work at Boston under Dr. Mary E. Morse, pathologist, assisted on part time by Dr. Geneva Tryon (bacteriological studies in a new form of dysentery, sympathetic system studies, aphasia).

(*g*) Psychopathic Hospital. (See publications above, including monograph No. 1 (Yerkes, Bridges, Hardwick) on the Point Scale (mental measurements).

(*h*) Continuation of pathological work at Monson under Dr. Douglas A. Thom, pathologist (brain studies in epilepsy, normal-looking brains in epilepsy, epileptic dementia).

(*i*) Continuation of the important series of brain studies at Massachusetts School for the Feeble-minded (Waverley Research Series I.–X., progress on XI.–XX.).

Respectfully yours,

E. E. SOUTHARD, M.D.,
Pathologist.

PROGRESS IN PSYCHIATRY.

The year's progress in psychiatry is briefly discussed from (*a*) the local and (*b*) the general point of view.

(*a*) *Local.* — As detailed elsewhere in this report, and in annual reports of the several institutions, the progress of the year in psychiatry in Massachusetts may be summed up as follows: —

First. — Official development of *out-patient departments* in connection with the majority of State institutions was mentioned last year as a most important advance in psychiatry. This development has continued, and is now in charge of the superintendents and officers of the local institutions.

Out-patient departments have been established in Boston, Psychopathic Hospital, Danvers, Worcester, Northampton, Monson, Taunton, Grafton, the Waverley School, Westborough and Gardner. Reports of these activities have been made in Bulletins of the State Board, Nos. 5 (January), 8 (April), and 14 (October), to which reference may be made for details. Some of these out-patients are after-care cases; fortunately the great majority either resort to the hospitals themselves for a variety of reasons, or are sent to the hospitals by various public, semi-public and private agencies.

The Psychopathic Hospital out-patient department is numerically by far the largest, handling over 100 new cases a month. Less than one-quarter of the new cases at the Psychopathic Hospital are referred to the wards for bed treatment.

It can readily be seen that a new community service is being established by the institutional system, and that the old-

time dread of institutions is to some extent passing. It remains for the future to determine how far these measures will serve as actual mental prophylaxis for the State in the direction of reducing the number of custodial patients. It is clear that we must expect from year to year a decided increase in the number of patients resorting to the institutions; but the class of patients resorting in this way to what may be called the mental hygienic branch of the public service will slowly alter, until the public institutions will finally deal with milder cases and earlier than formerly. The out-patient clinics have another important function, namely, that of educating the physicians of the community in matters of mental hygiene, particularly in relation to the value of the modern mental tests, and in the matter of curative and preventive work in syphilis of the nervous system.

Second. — The relations of mental diseases and psychopathic tendencies to crime are of great importance. The *surveys of criminals* at the Massachusetts State Prison, Charlestown, and at the Bridgewater State Hospital, as instituted by the State Board with the concurrence of the Prison Commission, have proved of interest, both from the medical and from the psychological points of view. Over one-half the Charlestown cases were shown to present important mental aspects. Only 38 in 100 cases failed to present abnormal conditions of some sort. Twenty-three were feeble-minded, 13 were victims of alcoholism, and the remainder showed a variety of psychopathic conditions, 4 being definitely insane (see report by A. W. Stearns in Bulletin No. 16). Psychologically, 29 per cent. of 100 subjects specially examined by systematic mental tests proved to be feeble-minded, and 11 per cent. more were on the border line of feeble-mindedness. The 29 per cent. feeble-minded cases were regarded as actual committable or custodial cases (see reports of C. S. Rossy in Bulletins Nos. 13 and 15 of the Board). This work is being continued, and by the time of issue of this report 300 cases will have been examined by systematic mental tests.

The importance of psychiatric and psychometric examinations in delinquents cannot be overestimated, and the results tend to demarcate the plane of contact between the work of the State Board of Insanity and that of the Prison Commission more

exactly than in the past. The community undoubtedly has an uneasy feeling that a great many criminals belong in insane hospitals rather than in prisons. The community has also been taught to believe, perhaps rather too extensively, in the feeble-minded nature of numerous delinquents, especially juvenile delinquents. The only means of solution of this problem lies in exact psychiatric and mental test work. The fact that Massachusetts has done exact work in this field is encouraging; it may be hoped that special psychopathic wards will be established in connection with many of the prisons, both for males and females, as a result of modern exact knowledge. Sherborn Reformatory is in dire need of such provision. It should be said that the exact work also has the happy effect of destroying generalizations of too sweeping a nature, since these examinations show that, after all, a certain large proportion of delinquents cannot be shown to be psychopathic in any important sense of the term.

Third. — The pathological service of the State Board, whose establishment was described last year, has been further developed. Its functions and results have been sufficiently described in the pathologist's report, but special attention should be drawn to the improvement of our *efficiency in the study of casualties.* It is to be hoped that these studies may procure a better adjustment of the attitudes of the institutions on the one hand, and of the public on the other, to the much heralded "abuses" of the institutions. The middle course between alarmist reports on the one hand and avoidance of due publicity on the other is a difficult course to steer. The number of *severe* accidents for 1915 is absolutely about the same as for 1914. This amounts to a relative decrease on account of the increase in the number of patients handled by the institutions, and especially on account of the fact that for some years past the State has had to forego proper increase in the number of available bed space. The number of minor accidents shows a large apparent decrease in 1915 over 1914. Whether this is due to an alteration in the standards of reporting accidents, or represents an actual improvement in the status of the patients, is impossible to say.

Fourth. — The *extension training course* for assistant medical

officers held at the Psychopathic Hospital has been given a further trial. There has no doubt been a greater approach to standardization of medical officers through the requirements of the State Board of special training for appointees. There is hardly any question that it is becoming increasingly difficult to attract men to the State hospital service and to hold them there. One reason for this is the large multiplication of general and special hospitals in Massachusetts and other States, which hospitals set up a lively competition for the better medical graduates, affording special privileges to their appointees or giving them salaries. Against this tendency may be set the general improvement in the psychiatric situation, brought about by the attractiveness of the anti-syphilis program and by the effort of the mental hygiene societies, local and national. The spread of the social service idea has also tended to increase the attractiveness of the State hospital positions, since it has become clear that the State hospital superintendent has one of the largest social service opportunities possible. On the whole, it may be questioned whether the standard of men going into the State service is being maintained at the level of some years since. Whatever the issue of this present difficulty, there is no doubt that standardization like that being made by the State Board's extension training course, and the State Board's requirement of this course or its equivalent, for the proposed appointees, are measures which will in the long run tend to betterments of the service, since the general level of requirements may be gradually increased if salaries can be raised, and if the service can be rendered more attractive in still other ways. In this direction, the State Board's *standardizing the salary schedule*, so far as that is consistent with the duties of the Governor and Council and with exigencies of exceptional cases, is bound to bear fruit.

Fifth. — Several other local developments of major importance have been touched on elsewhere in this report, notably (*a*) social service; (*b*) occupational industry of patients from the therapeutic point of view; (*c*) the syphilis branch of the State Board's investigative work; (*d*) work on various local institutional hygienic problems; (*e*) improvement in local institutional equipment for meeting laboratory needs; (*f*)

special work in brain anatomy in the feeble-minded; (*g*) progress in determining the organic and functional fractions of the epileptic population of the institutions; (*h*) local lecture courses at the institutions.

(*b*) *General.* — As in 1914, so in 1915 the world's progress in psychiatry has been interfered with by the great war. There has been an increasing number of articles in Germany, France and England relative to the ward and the *traumatic neuroses* (Oppenheim, Marie, Mott, etc.).

The most active work in psychiatry undoubtedly has relation to the problems of *brain syphilis* and its treatment with a number of associated problems concerning the cerebrospinal fluid and the conditions of the meninges. The whole question of the varieties of brain syphilis and their respective curabilities may be said to be in an unsettled state. Intensive treatment of brain syphilis of the so-called cerebrospinal (non-paretic) type is commonly conceded to be of supreme value in a large but undetermined proportion of cases. There is no evidence that equally intensive treatment of great groups of brain syphilis cases of the paretic type has been carried out by enough workers. In fact, it was the obvious neglect of the experimental treatment of paresis which led the State Board to establish the syphilis branch of its investigative service, and to put it in charge of a syphilographer.

There is a tendency to regard cases of brain syphilis which can be cured by salvarsan and allied drugs as forming a single group of curable cerebrospinal syphilis, and to regard cases that prove refractory to these arsenic-containing drugs as a second clinical group. In point of fact, it may prove that cerebrospinal syphilis and general paresis form two independent groups of mental disease, both of syphilitic origin and each composed of cases which recover and cases which do not recover under treatment. There are also, doubtless, cases which recover without treatment.

There is evidence of the extension of syphilographic interest to feeble-mindedness and epilepsy, as well as to the great groups of mental and nervous diseases in general. The research of the immediate future will permit us to evaluate the share of syphilis in feeble-mindedness. It is possible that the

syphilitic fraction of the feeble-minded is relatively larger than the syphilitic fraction of the epileptics.

There is in general a considerable dearth of detailed work upon autopsy material in cerebrospinal syphilis and general paresis, although there is no question that a great deal of such work is necessary for the purpose of distinguishing the curable and noncurable types of the disease and of learning just what the special significance of chemical, cytological and immunological changes of the cerebrospinal fluid may be. The lamented death of Prof. Alois Alzheimer, director of the psychiatric clinic at Breslau, formerly so long associated with Kraepelin at Munich, will undoubtedly be a blow to this work, since Alzheimer had done more than others in the differentiation of brain syphilis types.

Many preparations allied to salvarsan and neosalvarsan have been put upon the market, some of them of doubtful value. Since the death of Ehrlich, the inventor of salvarsan, there has apparently been no theoretical advance of major importance in this direction. On account of the war and the high cost of salvarsan, the drug is being prepared in various parts of this country. It is to be hoped that the State Department of Health in Massachusetts will obtain permission to work in this field in order to distribute to the physicians, or, at all events, to State hospitals and other great institutions, a sufficient quantity of the drug or an adequate substitute.

The Gold Sol method of Lange, a recent outcome of the older developments of colloid chemistry in the hands of Graham, has proved its value in psychiatric diagnoses.

The progress of psychiatry has been relatively rapid since (1) the initial advances in knowledge of the cerebral cortex and of the great variety of possibilities in its diseased processes, and since (2) the introduction of diagnostic lumbar puncture; thereupon the determination (3) that general paresis had a somewhat specific sign (lymphocytosis and plasmocytosis) in the cerebrospinal fluid, (4) the introduction of the Wassermann method for the determination of syphilis products in the blood serum and the cerebrospinal fluid, (5) the discovery and promising results of salvarsan, (6) the Noguchi-Moore discovery of spirochetes in numerous cases of general paresis, and (7) the

promising results of intraspinal treatment of syphilis by various methods have directed the medical world's attention to mental diseases as never before; also (8) the Gold Sol method has proved another important step. It appears to be the consensus of opinion that any person, especially any male adult, showing mental symptoms deserves blood test for syphilis. Most authorities agree that any case with psychopathic symptoms and a positive blood test for syphilis deserves diagnostic lumbar puncture. In fact, any case with "organic" symptoms of nervous or mental disease probably deserves a diagnostic lumbar puncture, if only to exclude the diagnosis of brain syphilis. It is also true that there is an increasing number of congenital syphilis cases that accrue from routine blood serum testing in clinics for children and adolescents. That so much of this advance is due to a few brilliant steps in the pathological, bacteriological and pharmacological laboratories is a matter for congratulation.

The fact that the Abderhalden method has failed to prove particularly valuable in psychiatry, and has been reduced in many minds to the quality of a brilliant but as yet unworkable idea, is merely an incident in the progress of science.

Syphilis has drawn the attention, not only of the general practitioner, but also that of the public health worker to psychiatry. The movement for the *mental hygiene* branch of the public service of the Federal government has not yet succeeded; but when it succeeds it will doubtless prove to be due in part to the confidence of the medical world that, at all events, in syphilis we have something concrete to found a research policy upon.

Only a little short of this foundation-stone value of new syphilis knowledge is our progress in *mental tests*. As noted last year, Germany has for years followed the policy of sending military and naval surgeons for long periods of service in nervous and mental clinics, and doubtless this policy has been productive of a certain efficiency, *e.g.*, in keeping feeble-minded out of submarines and other dangerous situations. Our country has not taken such definite measures in this regard; but the military and naval surgeons are alive to the topic. The Naval Bulletin contains from time to time papers on mental tests.

There has been an extraordinary interest in the development of mental tests, especially in the revision of the original tests chosen by Binet and Simon. Valuable rearrangements of these tests, with the addition of others, have been made by several American workers, notably by Goddard, Healy, Terman, Woolley and Yerkes. The value of these tests is naturally not absolute, and is not taken as absolute by any competent workers. Nevertheless, their approximate exactitude and practical reliability have doubtless been the basis for the establishment of so-called psychopathic laboratories in connection with various courts, and psychological laboratories in connection with schools and other institutions.

It is doubtless of the utmost importance to remember that the mental tests have comparative value only in connection with the educational and general functional level of the patients tested; moreover, the tests have intellectual rather than moral and volitional significance, at least for the most part. Again, there is lacking any considerable amount of anatomical correlation with the results of mental tests and the clinical and educational estimates of mental capacity.

Although the Federal government has not at this writing established a mental hygiene branch of its public health service, yet the National Committee for Mental Hygiene has been extremely active in laying down a policy, as mentioned in last year's report. The local Mental Hygiene Society has co-operated so far as possible, and has been particularly successful in its propaganda work executed by the secretary, Dr. Frankwood E. Williams. The director of the national committee, Dr. Thomas W. Salmon, has been levied upon for advice in a great number of administrative and sociological situations by a number of the Massachusetts hospital officers.

There has been a considerable advance in the psychopathic branch of *medical social service,* although the number of clinics employing medical-social workers is, after all, small in the country at large, and the number of such workers having psychopathic hospital or other psychopathic experience is still smaller.

The chances are that every medical social worker, whatever his or her sphere of work, would profit by psychopathic in-

stitutional experience, but workers dealing with psychopathic cases as the main part of their work undoubtedly will not get on with the training at present afforded by schools for social workers. Special postgraduate experience is stringently necessary.

What with the world's interest in syphilis and other somatic diseases as the basis of mental disorder, and with society's interest in reducing the costs of maintenance of the custodial mentally wrecked, the interests of the individual are somewhat likely to be neglected.

The publication of Kraepelin's fourth volume (the first was published in 1909) in 1915 concludes the most systematic attempt to cover the whole field of psychiatry by one man now in existence.

The large German handbook edited by Aschaffenburg is not yet complete. Various sections in Aschaffenburg's handbook, especially Bleuler's volume on schizophrenia and Kraepelin's textbook just mentioned, give the modern alienist a good background for study. Bleuler's work in particular is described by him as due to a conjugation of the ideas of Freud and of Kraepelin, and may be regarded as one of the most practical outcomes of the Freudian movement.

OCCUPATION AND INDUSTRIES.

There has been written for the Board a report of work each month.

There was made in January a survey of occupations of the State institutions under this Board, showing on a single day the total number of patients at each institution, the total number employed, the total number unable to be employed, and also the total number idle. There was also a detailed statement of work, hours of employment, instructors employed and their qualifications, entertainments and games.

Institutions.	Total Number employed.	Number unable to work.	Number of Patients Idle.	Total Number in Hospital.
Worcester State Hospital,	1,273	110	35	1,418
Taunton State Hospital,	899	203	161	1,263
Northampton State Hospital,	438	353	92	883
Danvers State Hospital,	901	294	260	1,455
Westborough State Hospital,	855	143	213	1,211
Boston State Hospital,[1]	854	430	137	1,421
Psychopathic Department,	25	58	-	83
Grafton State Hospital,	1,094	96	201	1,391
Medfield State Hospital,	1,326	226	78	1,630
Gardner State Colony,	681	24	35	740
Mental Wards, State Infirmary,	348	127	236	711
Bridgewater State Hospital,	341	254	200	795
Monson State Hospital,[2]	787	103	48	938
Foxborough State Hospital,	154	72	58	284
Massachusetts School for the Feeble-minded,	1,175	420	-	1,595
Wrentham State School,	610	30	-	640

[1] Exclusive of Psychopathic Department. [2] Number of children in school, 40.

There has also been made a survey of accommodations for industrial work at the State institutions. This has shown the inadequate conditions existing for industrial work, only two institutions in the State being equipped with suitable industrial buildings.

There has been made a report on printing of State institutions. At the present time four institutions do a certain amount of printing. Could the remaining eleven institutions do the same, an added occupation would be given the patients, and approximately $5,700 would be saved to the Commonwealth.

The work of occupational therapy has made an advance throughout the institutions of the State, but there is yet a lack of the organization which is necessary if the work is to be as effective as we could wish.

More patients are being reached and are being occupied than formerly, both on the wards and in the industrial rooms. Each hospital has increased its equipment for industrial work,

and in several instances the industrial rooms have been extended. Interest centers in a greater variety of occupations, and the quality of the work is very greatly improved.

The advantages of having trained instructors have been recognized. There are now 9 instructors having had normal as well as special training. This is an increase of 2 over the number of a year ago, and an increase of 6 over the number of two years ago.

There has been but little change in the personnel of the women instructors; death in two instances has been the cause of a change. Two hospitals have each added a trained assistant during the year.

In the report of 1914 a course of training in handwork as a necessary part of the course of the training school for nurses, including both class instruction and experience in the industrial room, was given as one of the necessary developments in the organization of occupational therapy in a hospital.

A year ago 10 State institutions had signified their intention of having such a course in handwork as part of the regular training school course. Worcester, Taunton, Westborough, Boston, Grafton and Medfield State hospitals, Gardner State Colony and Monson State Hospital have had such courses. The remaining two hospitals of the ten before mentioned (Northampton and State Infirmary) were delayed by unforeseen events, but are at present ready to begin classes.

Two years ago there were two hospitals in the State (Taunton and McLean) where class instruction in handwork was a part of the training school course, and four hospitals (Worcester, Danvers, Boston and Grafton) where time in the industrial room was given. There was no hospital where both forms of instruction were required.

On June 18, 1915, the Board voted that such courses in training schools should be obligatory.

Two hospitals (Northampton and Medfield) have recently been able, through gifts, to start industrial funds.

There have been shown during the year three State exhibits of diversional occupation for the insane. The first, a representative exhibit of the work of the State, was shown at the meeting of the American Medico-Psychological Association,

held at Old Point Comfort, Va., from May 11 to 14. It consisted of 353 articles, including examples of string work, basketry, embroidery, leather work, metal work, pottery, weaving and wool. Brushes, brooms, boots, shoes, tinware and pictures were also shown.

At this meeting 32 institutions were represented. Thirteen were from Massachusetts, 12 of them being State institutions and 1 a private hospital. Fifteen certificates were received by institutions in this State, showing the best work as follows: glazed pottery, unglazed pottery, oil painting, hammered brass-work, coca fiber rug, tools and tinware, hammered copper work, leather work, reed shirtwaist box, senna mat, string work, reed basket work, jardinière and pedestal, woven bedspread and small loom work.

At the meeting of the association a map of the United States was shown on which it was intended to place a gold star for each hospital fulfilling the following conditions: —

(*First.* — That there should be a director of occupational work with assistant teachers.

Second. — More than 50 per cent. of unwilling workers occupied.

Third. — Industrial work as a part of the training school for nurses.

Fourth. — Industrial departments as well as work upon the wards.

Fifth. — Industrial work should be self-supporting, — this last not considered necessary to secure a star.

It was found that five hospitals of Massachusetts were entitled to gold stars under the first four provisions of said map, — Worcester, Boston, Grafton, Gardner and Monson.

The exhibit which was shown at Old Point Comfort in May, with a few articles added, was shown in Room 439 of the State House from June 7 to 15, inclusive. This exhibit was announced in the daily papers, and 410 cards were sent to those who were considered especially interested in the subject of diversional occupation for the mentally sick. The exhibit was visited by nearly 900 people, 100 of them being directly connected with institutional work.

An exhibit at Kingsley Hall, Boston, was held in connection with the Conference of the Massachusetts Society for Mental

Hygiene, opening the evening of November 17 and continuing on Thursday and Friday, November 18 and 19, from 9 A.M. to 10 P.M. Fifteen institutions exhibited, 12 State hospitals, McLean Hospital and 2 schools for feeble-minded. Each institution had approximately 10 by 11 square feet of floor space and 11 by 12 square feet of wall space. All institutions sent one or more representatives to demonstrate the work during the exhibit. It was estimated that between 1,700 and 1,800 people attended.

During the year 11 State institutions have had exhibits or sales, or both, either at their own institution or outside. In some instances the institutions have held several such exhibits or sales.

The Massachusetts State Conference of Charities, at their twelfth session in Pittsfield, October 20, 21 and 22, invited the Northampton and Monson State hospitals to send exhibits of patients' work. These were arranged as part of the welfare exhibit of the conference. It was the first exhibit of its kind held in the vicinity and attracted much attention.

For the better display of the work of the patients 3 hospitals have each set apart a small room for exhibit purposes and 4 hospitals have added exhibit cases.

During the year there have been developments along several lines of work, the most noticeable being pottery. Two hospitals (Worcester and Westborough) have installed kilns, Worcester State Hospital has three potters' wheels, and turned as well as coiled pottery is made. The subject has also been introduced in other hospitals.

The war relief fund has given an added occupation to several hospitals. Materials have been supplied by outside friends, and wristers, helmets and socks have been knitted, and clothing of all kinds has been made.

More gardening has been accomplished by women in specific instances, but *there is yet a field for organized effort.*

The regular period of work, under the supervision of the nurse present upon the ward, for patients who are unable to go to departments or the industrial rooms has been followed in some hospitals with marked success. There is, however, much to do before a general atmosphere of industry through the wards can be attained.

OUT-PATIENT DEPARTMENTS.

The following shows the work accomplished under this heading during the months of *July, August* and *September,* 1915: —

Worcester State Hospital.

Report of Superintendent.

Clinics.

Total number of first visits,	31
Total number of patients,	65
Total number of visits,	84
Sources of first visits: —	
Referred by physicians,	2
Referred by schools,	3
Referred by out-patient department patient,	2
Came by own initiative,	1
Cases discharged from this hospital reporting for the first time,	11
Miscellaneous and unknown,	12
Total,	31

Clinics held.

Hospital, every Tuesday from 2 to 5 P.M., and 7 to 9 P.M.
Spencer, first Wednesdays of the month, 2 new patients.

After-care.

Total number of patients leaving hospital,	162
Total number discharged to after-care,	75
Total number of visits by social worker	158
Total number of patients on visit,	77

Boarding-out.

Total number boarded out by hospital,	47
Total number placed,	7
Total number returned,	1
Total number discharged,	1
Total number escaped,	1
Total number visited by social worker,	79
Total number visited by physician,	29

Mental Hygiene.

Lecture or talk by member of hospital,	8

Taunton State Hospital.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	17	9	26
Total number of patients,	51	39	90
Total number of visits,	62	39	101
Sources of first visits: —			
Referred by physicians,	-	3	3
Referred by charitable and other organisations,	3	2	5
Referred by courts,	1	-	1
Referred by schools,	6	1	7
Came by own initiative,	3	1	4
Cases discharged from this hospital reporting for first time,	4	2	6
Totals,	17	9	26

Ten cases were seen by Dr. Walter E. Fernald, superintendent of the Massachusetts School for the Feeble-minded, in co-operation with hospital clinic.

Clinics held.

Hospital, every Tuesday from 2 to 5 P.M.
Fall River, every Friday from 10 A.M. to 12 M.
New Bedford, every Friday from 1 to 3 P.M.

After-care.

Total number of patients leaving hospital,	90
Total number discharged to after-care,	12
Total number of visits by social worker,	30
Total number of patients visited by social worker,	91

Boarding-out.

Total number boarded out by hospital,	42
Total number boarded out by transfer,	22
Total number placed,	2
Total number returned,	4
Total number visited,	90

Northampton State Hospital.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	18	35	53
Total number of patients,	18	41	59
Total number of visits,	18	40	58
Sources of first visits: —			
Referred by physicians,	–	9	9
Referred by other hospitals,	1	1	2
Referred by charitable and other organizations,	4	7	11
Referred by courts,	–	1	1
Came by own initiative,	3	3	6
Cases discharged from this hospital reporting for first time,	10	14	24
Totals,	18	35	53
Relatives inquiring about patients,	15	17	32
Papers signed for commitment to Wrentham,	–	2	2
Papers signed for commitment to Waverley,	1	–	1

Clinics held.

Hospital and office of social worker, July 9, 17, 19, 29; August 22, 27; September 14, 18.

Springfield, Springfield Academy of Medicine, every second and fourth Wednesday of each month.

Greenfield, Franklin County Hospital, every second Monday of each month.

Pittsfield, House of Mercy Hospital, every fourth Thursday of each month.

After-care.

Total number of patients leaving the hospital,	111
Total number discharged to after-care,	57
Total number of visits by social worker,	51
Total number of patients visited by social worker,	50
Total number of patients on visit,	101

Boarding-out.

Total number boarded out by this hospital,	35
Total number placed,	8
Total number returned,	2
Total number of visits,	45

Monson State Hospital.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	8	6	14
Total number of patients,	8	6	14
Total number of visits,	8	9	17
Sources of first visits: —			
Referred by physicians,	6	–	6
Brought by district nurse,	–	2	2
Came by own initiative,	2	4	6
Totals,	8	6	14

Danvers State Hospital.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	27	14	41
Total number of patients,	51	49	100
Total number of visits,	76	91	167
Sources of first visits: —			
Referred by other hospitals,	1	–	1
Came by own initiative,	–	1	1
Cases discharged from this hospital reporting for first time,	26	13	39
Totals,	27	14	41

Clinics held.

No regular clinic days at hospital. Physicians will see former patients coming for advice at any time.

Newburyport, district court house, July 6: 2 patients reported; 1 first visit.

Malden, city hall, July 7: 14 patients reported; 6 first visits. City hall, August 18: 9 patients reported; 5 first visits. City hall, September 22: 12 patients reported; 4 first visits.

Haverhill, district court, July 14: 7 patients reported; 2 first visits. district court, September 1: 4 patients reported.

Lawrence, city hall, July 21: 9 patients reported; 2 first visits. City hall, August 26: 10 patients reported; 1 first visit.
Gloucester, city hall, July 28: 4 patients reported; 1 first visit. City hall, September 15: 3 patients reported.
Salem, city hall, August 11: 14 patients reported; 5 first visits. City hall, September 29: 10 patients reported; 2 first visits.
Lynn, city hall, August 12: 10 patients reported; 4 first visits. City hall, September 8: 5 patients reported; 1 first visit.
Total number of patients present, 113.

Number of Physicians connected with the Hospital Present. — Newburyport: July 6, 1. Malden: July 7, 1; August 18, 1; September 22, 2. Haverhill: July 14, 2; September 1, 2. Lawrence: July 21, 1; August 26, 1. Gloucester: July 28, 1; September 15, 2. Salem: August 11, 1; September 29, 2. Lynn: August 12, 1; September 8, 2.

Number of Physicians not connected with the Hospital Present. — Newburyport: July 6, 1. Malden: July 7, 1. Lawrence: July 21, 1; August 26, 1.

Number of Other Visitors Present. — Salem: August 11, 4; September 29, 4 and 1 inquirer. Lynn: August 12, 4 and 1 local newspaper reporter; September 8, 1. Lawrence: August 26, 4 and 1 inquirer. Haverhill: September 1, 4 and probation officer. Gloucester: September 15, 1. Malden: September 22, 5 and 2 inquirers.

After-care.

Total number of patients leaving hospital,	196
Total number discharged to after-care,	111
Total number of visits by social workers,	135
Total number of patients visited by social workers,	117
Total number of patients on visit,	169

Boarding-out.

Total number boarded out by this hospital,	12
Total number placed,	1
Total number returned,	2
Total number visited,	6

Westborough State Hospital.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	9	20	29
Total number of patients,	17	30	47
Total number of visits,	24	37	61
Sources of first visits: —			
Referred by physicians,	1	3	4
Referred by other hospitals,	–	1	1
Referred by schools,	2	–	2
Came by own initiative,	1	6	7
Cases discharged from this hospital reporting for first time,	5	10	15
Totals,	9	20	29

Clinics held.

Hospital, every Wednesday from 2 to 3 P.M.

Boston, Massachusetts Homœopathic Hospital, every Tuesday from 2 to 3 P.M.

After-care.

Total number of patients leaving hospital,	232
Total number of patients discharged to after-care,	154
Total number of visits by social worker,	146
Total number of patients visited by social worker,	15
Total number of patients on visit,	201

Boarding-out.

Total number boarded out by hospital,	62
Total number placed,	11
Total number returned,	15
Total number visited,	91

Boston State Hospital.

Report of Superintendent.

After-care.

Total number of patients leaving hospital,	189
Total number of patients discharged to after-care,	126
Total number of visits by social worker,	44
Total number of patients visited by social worker,	21
Total number of patients on visit,	135

Boarding-out.

Total number boarded out by hospital,	10
Total number placed,	4
Total number returned,	1
Total number visited,	10

Psychopathic Department, Boston State Hospital.

Report of Director.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	187	183	370
Total number of patients,	415	397	812
Total number of visits,	951	791	1,742
Sources of first visits: —			
Referred by physicians,	9	9	18
Referred by other hospitals,	75	54	129
Referred by charitable and other organizations,	61	26	87
Referred by courts,	1	13	14
Referred by schools,	2	6	8
Came by own initiative,	19	17	36
Cases discharged from this hospital reporting for first time,	20	52	72
Miscellaneous,	–	6	6
Totals,	187	183	370

After-care.

Total number of patients leaving hospital,	478
Total number discharged to after-care,	145
Total number of visits by social workers,	572
Total number of patients visited by social workers,	48
Total number of patients on visit,	14

Grafton State Hospital.

Report of Superintendent.

Clinics held.

Hospital, Worcester, every Friday from 3 to 5 P.M. and 7 to 9 P.M.
Colony, Grafton, every Wednesday from 2 to 4 P.M. and 7 to 9 P.M.

After-care.

Total number of patients leaving hospital,	15
Total number discharged to after-care,	1
Total number of visits by social worker,	41
Total number on visit,	12

Boarding-out.

Total number boarded out by hospital,	29
Total number returned,	2
Total number remaining,	27

Medfield State Hospital.

Report of Field Worker.

After-care.

Total number of patients leaving hospital,	19
Total number discharged to after-care,	7
Total number of visits by social worker,	106
Total number of patients visited by social worker,	5
Total number of patients on visit,	4

Boarding-out.

Total number boarded out by hospital,	29
Total number placed,	2
Total number returned,	6
Total number transferred,	2
Total number visited,	51

Gardner State Colony.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	6	1	7
Total number of patients,	6	6	12
Sources of first visits: —			
Referred by physicians,	5	–	5
Referred by charity worker,	–	1	1
From notice in newspaper,	1	–	1
Totals,	6	1	7

Clinics held.

Fitchburg, city hall: July 7, August 11 and September 1.
One visit to home, requested by physician, to inquire into mental condition.

After-care.

Total number of patients leaving hospital,	31
Total number discharged to after-care,	3
Total number of patients on visit,	5

Boarding-out.

Total number boarded out by hospital,	30
Total number placed,	9
Total number returned,	4
Total number visited,	30

Bridgewater State Hospital.

Report of Medical Director.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	1	–	1
Total number of patients,	2	1	3
Sources of first visit: —			
Referred by other hospital,	1	–	1

Clinics held.

At Brockton Hospital,	6

Massachusetts School for the Feeble-minded.

Report of Superintendent.

Clinics.

	Males.	Females.	Totals.
Total number of first visits,	97	89	186
Total number of patients,	110	102	212
Seen at school,	36	35	71
Seen at Worcester,	2	1	3
Seen at Fall River,	7	3	10
Seen at Haverhill,	4	4	8
Advised by letter,	17	22	39
Advised by telephone,	29	26	55
Relatives seen and advised,	15	11	26
	110	102	212
Total number of visits,	49	43	92
Sources of first visits: —			
Referred by physicians,	35	18	53
Referred by other hospitals,	10	9	19
Referred by charitable and other organizations,	21	39	60
Referred by courts,	6	2	8
Referred by schools,	13	8	21
Miscellaneous,	12	13	25
Totals,	97	89	186

Clinics held.

School, every Thursday from 9 A.M. to 5 P.M.
Worcester State Hospital, clinic at city hall, 2 first visits, 1 second visit.
Taunton State Hospital, clinic held at Fall River, 10 first visits.
Haverhill, clinic held at high school, 7 first visits, 1 second visit.

After-care.

Total number of patients leaving school,	24
Total number of visits by social workers,	884
Total number of patients visited by social workers,	213
Total number of patients on visit,	[1] 284

Mental Hygiene.

Lectures or talks by superintendent,	12
Clinics,	13

[1] Includes 14 parole patients reporting.

COMMITMENTS FOR OBSERVATION AND TEMPORARY CARE FOR THE WHOLE STATE.

The number of commitments for observation (under section 43, chapter 504, Acts of 1909) was 149 for the year. The period designated by the judges in the various cases was usually thirty days.

Of these cases, 42 were subsequently committed, 4 were recommitted for observation, 2 were readmitted under chapters 395 or 174, 72 were discharged, 3 were committed to other institutions, 11 were admitted voluntarily, 1 was transferred to another institution, 2 died, and 13 were remaining at the close of the year.

Under chapter 307 of the Acts of 1910, requiring that emergency cases which come into the care or protection of the police in Boston be taken to the Boston State Hospital for temporary care, and forbidding the use of prisons, jails or penal institutions for such persons, 446 were taken to the Psychopathic Department of the Boston State Hospital. Of these, 164 were subsequently regularly committed to the Boston State Hospital, 64 were committed to other institutions, 161 were discharged, 2 died, 17 were admitted voluntarily, 9 were committed for observation, and 1 was readmitted under chapter 395 of the Acts of 1911, and 14 were returned to institutions. Ten such cases were remaining at the close of the year.

There were 13 admissions under section 34, chapter 504 of the Acts of 1909, which provides for the apprehension of a patient before examination and commitment. One of these was subsequently committed and 4 discharged, 5 were committed to other institutions, and there were 3 remaining at the close of the year.

Under chapter 395 of the Acts of 1911 and chapter 174 of the General Acts of 1915, — being an amendment of chapter 395 of the Acts of 1911, allowing of the admission of patients for ten days for temporary care, instead of seven days, as formerly, — 1,561 cases were admitted, of whom 595 were subsequently committed, 113 were committed to other institutions, 39 were committed for observation, 514 were discharged, 157 were re-

ceived under the voluntary status, 4 were returned to institutions, 61 were admitted as emergency cases, 11 were readmitted under chapters 395 or 174, 21 died, and 32 were remaining at the close of the year.

There were 98 emergency admissions under section 42, chapter 504, Acts of 1909, of whom 50 were regularly committed, 16 were committed to other institutions, 4 were admitted as emergency, 24 were discharged, and there were none remaining on September 30.

Voluntary admissions numbered 963, of whom 91 were regularly committed, 1 was committed for observation, 673 were discharged, 37 allowed to go on visit, 11 died, 1 escaped, and 149 were remaining at the close of the year.

	Admissions under —					
	Section 34, Chapter 504, Acts of 1909 (Apprehension of Alleged Insane Person).	Section 43, Chapter 504, Acts of 1909 (for Observation).	Chapter 307, Acts of 1909 (for Temporary Care, Boston Hospital).	Chapter 395,[1] Acts of 1911, amended by Chapter 174, General Acts of 1915 (for Temporary Care).	Section 45, Chapter 504, Acts of 1909 (for Voluntary Care).	Section 42, Chapter 504, Acts of 1909 (for Care in Emergency).
Admitted during year,	13	149	446	1,561	963	98
Discharged,	4	72	161	514	673	24
Discharged to Immigration Commission.	-	-	3	14	-	-
On visit,	-	-	-	-	37	-
On escape,	-	-	-	-	1	-
Died,	-	2	2	21	11	-
Regularly committed,	1	42	164	595	91	50
Committed for observation,	-	4	9	39	1	-
Readmitted under chapter 395 or 174,	-	2	1	11	-	4
Admitted as emergency,	-	-	1	61	-	4
Admitted voluntarily,	-	11	17	157	-	-
Returned to institutions,	-	-	14	4	-	-
Transferred to other institutions,	-	-	-	-	-	-
Committed to other institutions,	5	3	64	113	-	16
Voluntary to other institutions,	-	-	-	-	-	-
Remaining Sept. 30, 1915,	3	13	10	32	149	-

[1] Does not require a physician's certificate, and takes the place of section 44, chapter 504, Acts of 1909.

It is to be noted with interest that during the year covered by the report there were 963 voluntary admissions, 1,561 under chapter 395, Acts of 1911, and chapter 174, General Acts of 1915, and 446 under chapter 307, Acts of 1910, making a total of 2,970 patients who were admitted without any action of the court or judge or other very formal proceeding. Of these 2,970 cases thus admitted, 1,348 were discharged without commitment, 34 died before commitment, 174 signed voluntary requests, and 149 voluntary patients continued their stay in the voluntary status, no commitment being considered necessary, making a total of 1,705 persons who secured the benefits of treatment in our public or private hospitals for the insane without the formality of a procedure before a judge, which would have been attended with delays, legal exactions, semi-publicity and the stigma of having been pronounced insane, all of which was thus obviated, to the comfort and satisfaction of the patients and friends.

THE STABILITY OF SERVICE

in the institutions averages about the same as the previous year. There were 2.23 rotations of all employees, compared with 2.43 rotations the previous year; 2.46 in the nursing staff, compared with the same figure the previous year. The maximum stability for the whole service was at the Gardner Colony, where there were only 1.84 rotations; and for the nursing staff at the Medfield Hospital, where there were 1.72 rotations.

The average length of the interval between rotations of all employees was 5.44 months; of all nurses, 4.93 months; men nurses, 4.58 months; women nurses, 5.20 months.

The average shortage of employees was 5.17 per cent.

Rotation in Service of Persons employed in Institutions during the Fiscal Year ending Nov. 30, 1915.

INSTITUTIONS.	WARD SERVICE.									WHOLE SERVICE.		
	MEN.			WOMEN.			TOTALS.					
	Average Number of Nurses.	Number Different Persons.	Rotations.	Average Number of Nurses.	Number Different Persons.	Rotations.	Average Number of Nurses.	Number Different Persons.	Rotations.	Average Number of All Employees.	Number Different Persons employed.	Rotations.
The insane: —												
Worcester Hospital,	91	327	3.59	113	306	2.71	204	633	3.10	369	985	2.67
Taunton Hospital,	83	244	2.94	79	230	2.91	162	474	2.92	304	676	2.22
Northampton Hospital,	47	115	2.45	44	120	2.73	91	235	2.58	180	375	2.08
Danvers Hospital,	70	168	2.40	101	264	2.61	171	432	2.53	317	704	2.22
Westborough Hospital,	94	287	3.05	114	283	2.48	208	570	2.74	352	848	2.41
Boston Hospital,[1]	88	190	2.16	176	359	2.04	264	549	2.08	462	901	1.95
Grafton Hospital,	73	238	3.26	86	209	2.43	159	447	2.81	353	892	2.53
Medfield Hospital,	77	140	1.82	136	235	1.72	213	375	1.76	386	748	1.94
Foxborough Hospital,	24	56	2.33	14	38	2.71	38	94	2.47	99	224	2.26
Gardner Colony,	44	89	2.02	18	51	2.83	62	140	2.26	139	256	1.84
Totals,	691	1,854	2.68	881	2,095	2.37	1,572	3,949	2.51	2,961	6,609	2.23
Miscellaneous: —												
Monson Hospital,	45	95	2.11	57	107	1.88	102	202	1.98	208	402	1.93
School for the Feeble-minded at Waltham,	24	62	2.58	160	342	2.14	184	404	2.19	290	665	2.29
Wrentham School,	4	14	3.50	63	173	2.75	67	187	2.79	111	294	2.65
Totals,	73	171	2.34	280	622	2.22	353	793	2.25	609	1,361	2.23
Aggregates,	764	2,025	2.65	1,161	2,717	2.34	1,925	4,742	2.46	3,570	7,970	2.23

[1] Includes Psychopathic Department.

THE CAPACITY FOR PATIENTS

in all the institutions Dec. 1, 1915, was 16,436, compared with 15,834 the previous year, an increase of 602 beds. The whole number of patients in them was 17,287, compared with 16,346 the previous year, an increase of 941. Hence there is a deficiency of provision for 851 patients, or 5.17 per cent.

THE CAPACITY FOR THE INSANE

in State institutions Dec. 1, 1915, was 12,980, an increase of 210 beds. The whole number of patients in them was 13,806, as compared with 13,174 the previous year, an increase of 632. Hence there is a deficiency of provision for 826 patients, or 6.36 per cent.

There is no additional provision for the insane in process of construction. The Legislature of 1912 authorized the removal of patients from the Worcester Asylum to the Grafton Colony, and abandonment of the present asylum at Worcester. There are provisions for 159 patients at Grafton Colony not yet in use.

Work was in progress at the close of the year for 225 new beds for the feeble-minded. These will probably be available within the coming year.

Working Capacities of Institutions.

INSTITUTIONS.	WORKING CAPACITIES FOR 1916.					
	MALES.		FEMALES.		TOTALS.	
	Dec. 1, 1915.	Increase for the Year.	Dec. 1, 1915.	Increase for the Year.	Dec. 1, 1915.	Increase for the Year.
The insane: —						
Worcester Hospital,	783	-	646	-	1,429	-
Taunton Hospital,	611	6	598	-	1,209	6
Northampton Hospital,	426	-	393	-	819	-
Danvers Hospital,	566	1[1]	777	-	1,343	1[1]
Westborough Hospital,	518	-	643	32[1]	1,161	32[1]
Boston Hospital,	659	-	747	-	1,406	-
Grafton Hospital,	797	137	773	100	1,570	237
Medfield Hospital,	637	-	905	-	1,542	-
Gardner Colony,	454	-	257	-	711	-
Foxborough Hospital,	199	57[1]	100	57	299	-
Mental Wards, State Infirmary,	177	-	496	-	673	-
Bridgewater Hospital,	818	-	-	-	818	-
Totals,	6,645	85	6,335	125	12,980	210
Miscellaneous: —						
Monson Hospital (sane and insane),	548	7[1]	420	1[1]	968	8[1]
Massachusetts School for the Feeble-minded,	941	-	542	-	1,483	-
Wrentham School,	450	190	555	210	1,005	400
Totals,	1,939	183	1,517	209	3,456	392
Aggregates,	8,584	268	7,852	334	16,436	602

[1] Decrease.

Working Capacities of Institutions — Concluded.

INSTITUTIONS.	Number of Patients in Institutions Dec. 1, 1915.[1]			Increase for the Year.	Excess of Patients.			
					Number of Males.	Number of Females.	Totals.	
	Males.	Females.	Totals.				Number.	Percentage.
The insane: —								
Worcester Hospital,	753	713	1,466	55	30[2]	67	37	2.58
Taunton Hospital,	650	603	1,253	21	39	5	44	3.63
Northampton Hospital,	478	451	929	48	52	58	110	13.43
Danvers Hospital,	637	841	1,478	50	71	64	135	10.05
Westborough Hospital,	529	712	1,241	57	11	69	80	6.89
Boston Hospital,	705	893	1,598	126	46	146	192	13.65
Grafton Hospital,	785	851	1,636	236	12[2]	78	66	4.20
Medfield Hospital,	644	985	1,629	15[2]	7	80	87	5.64
Gardner Colony,	464	282	746	27	10	25	35	4.92
Foxborough Hospital,	233	76	309	40	34	24[2]	10	3.34
Mental Wards, State Infirmary,	196	505	701	32[2]	19	9	28	4.16
Bridgewater Hospital,	820	–	820	19	2	–	2	.24
Totals,	6,894	6,912	13,806	632	249	577	826	6.36
Miscellaneous: —								
Monson Hospital (sane and insane),	529	492	1,021	76	19[2]	72	53	5.47
Massachusetts School for the Feeble-minded,	1,018	603	1,621	31	77	61	138	9.30
Wrentham School,	371	468	839	202	79[2]	87[2]	166[2]	16.51[2]
Totals,	1,918	1,563	3,481	309	21[2]	46	25	.72
Aggregates,	8,812	8,475	17,287	941	228	623	851	5.17

[1] Does not include patients in family care under trustees.

[2] Decrease.

THE PUBLIC INSTITUTIONS.

Worcester State Hospital.

Opened in January, 1833. Present capacity, 1,429.

Valuation of the plant, per capita of capacity, $1,544; real estate, $1,422; personal, $122.

Daily average number of patients under care, 1,450; in hospital, 1,419; in family care, 31; increase for the year, 65.

Number Oct. 1, 1915, 1,459; in hospital, 1,412; in family care, 47.

All commitments, 499; decrease for the year, 78.

Commitments as insane, 466; decrease for the year, 91.

First cases of insanity, 368; 78.97 per cent.

Voluntary admissions, 18.

Commitments as inebriate, 2.

Temporary-care admissions, 82.

First Cases of Insanity.

Native-born patients, 49.18 per cent.; mothers, 27.46 per cent.; fathers, 28.03 per cent.

Age sixty years or over, 23.22 per cent.

Residents in cities or large towns, 76.63 per cent.; country districts, 23.37 per cent.

Previous duration of insanity, under six months, 40.70 per cent.

Curable forms of insanity, 16.03 per cent.

Causes: congenital, 19.57 per cent.; hereditary, 17.66 per cent.; alcoholic, 17.39 per cent.; senility, 12.77 per cent.; coarse brain lesions, 7.34 per cent.; syphilis, 6.79 per cent.

Recoveries of the Insane.

Whole number, 46; 9.87 per cent. of commitments.

Recoveries of first cases of insanity, 33; 8.97 per cent. of first cases.

Recoveries in curable group A, 27; 45.76 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 132; 6.80 per cent. of whole number of persons treated.

Curable forms of mental disease present in 3.79 per cent.; tuberculosis in 9.09 per cent.; senile insanity in 28.78 per cent.; general paralysis in 18.94 per cent.; coarse brain lesions in 23.48 per cent.

Finances.

Expenditures from maintenance funds, $372,577; total receipts, $53,170; being $34,579 from private patients, $16,212 from reimbursing patients, $2,379 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.88; the same less repairs and improvements, $4.62.

Weekly per capita cost of whole service, $1.98; ward service, $0.83.

One person employed for every 3.86 patients; 1 nurse for every 6.98 patients.

Average monthly wage for all persons employed, $34.09; for nurses, $25.81; men, $27.47; women, $24.48.

Extract from Superintendent's Annual Report.

The general health of the institution has been good. There has been no case of contagious disease of any kind during the year among either patients or employees, a fact which is rather remarkable when we consider the large numbers of persons who are resident here, and that new cases are being constantly received from the general community. Dysentery, which for several years assumed almost an epidemic form, has practically ceased to exist. During the year but two cases of this disease occurred, both of which recovered. I cannot but attribute this excellent result in great measure to the painstaking care of the medical staff and the very vigorous and effective general sanitary measures which have been enforced.

A few cases of pellagra have occurred among the patients. This is a disease which is more prevalent in the south and west than in New England. That pellagra, however, has existed in this community in former years is undoubtedly true, and the fact of the recognition of most cases now may be partially accounted for by a greater accuracy in diagnosis. The nature and causes of this disease are but poorly understood. It is pretty generally

accepted, however, that it is due to faulty nutrition. Appropriate dietary treatment in many cases affords relief, and in some seems to effect a cure. In one fatal case it seemed fair to attribute the mental disease to the influence of the pellagra.

One of the most important changes of the year has been the reorganization of the training school for nurses. No other agency for their care can ever come into such intimate relation with our patients as the nursing staff. How important, then, that we should not only make the best and most careful selection of the personnel of the nursing force, but also that, having secured good material, we should so shape and mold it as to best adapt it for the accomplishment of our ends, — the efficient and kindly care of those most unfortunate persons who have been committed to our institutions. While the training of the nurse is primarily that she may better and more intelligently care for her patients, it does supplement the too meager wage which the financial limitation of the hospital forces it to offer, and renders the service more attractive.

The training course has formerly covered a period of two years. The insane hospital, from the nature of its work, has hitherto been unable to offer to its pupil nurses that experience in certain branches which only a general hospital could offer, and with the limited time in the course has compelled its graduates to seek by postgraduate work to supplement the training which was received here. During the past year the training course has been extended to cover a period of three years. An arrangement has been entered into with Bellevue and the allied hospitals of New York whereby our nurses, at some time during the three years' course, preferably during the second year, are received there for a ten months' course, and on graduation here are given a certificate from Bellevue covering the work done there. In changing our course from two years to three years an option was given to the senior class to graduate at two years and receive a diploma accordingly. The interest and appreciation of the newly arranged course was shown by every member of the class electing to continue on the three years' basis.

The out-patient service, established last year, has been continued and seems to be appreciated by the community. At each of the clinics the social worker is present and follows up cases as the needs may indicate. Many former patients and those now out on visit report at such times and thus enable the institution to keep in touch with individual cases.

Early in our out-patient service attention was called to the needs of the backward and defective school children, a special clinic being arranged for these cases one-half day of each month, a representative from the staff of the School for the Feeble-minded co-operating with the members of our hospital staff. At first these clinics were held at the hospital, but the growing attendance finally led to a conference with the superintendent of schools, resulting in arrangements being made to hold a clinic in the school committee room in the City Hall, on the third Tuesday afternoon of each month. The city has no psychologist to examine the chil-

dren who are unable to keep up with the class work in the schools, and so many pupils have been presented for examination, and so much interest has been evinced that now a whole day is given up to this work once each month. At this clinic the child's mental age is established, and advice is given as to whether commitment to one of the schools for the feeble-minded is desirable, or whether the child may properly continue to be cared for in the community, under proper supervision. This latter class is given work in one of the ungraded schools, especially along the lines of manual training, and in a year is again brought up for examination to see if any good has been accomplished. The success of this clinic is largely due to the energetic work of Miss Edith M. Dixon, who arranges with the parents of a certain number of children each month to attend the clinic.

The growing importance of the social work, which for some time was carried on by different members of the medical staff, made it necessary early in the year to appoint a regularly trained social worker.

This whole out-patient and social work is doing something more than attending to the needs of the individuals and families immediately concerned. It is carrying on a campaign of education in the community; it is removing distrust and teaching the community that the hospital influence seeks to be kindly, helpful and co-operative; it is teaching the hospital to better understand the community view, and to more intelligently cope with the problem of securing for its patients as early a return to the home as possible. The social worker is invaluable in placing out-patients in family care and in their supervision when so placed. In discharging patients into the community where there is lack of information as to home conditions the report of the social worker is of great value in determining proper action. If patients have no home or friends, employment is sometimes secured, proper boarding places found, and assistance given in placing them once more in a position to become self-supporting.

The State Board of Insanity has removed from the institution practically all of its epileptics and the women inebriates and victims of drug habits, concentrating these cases in certain specified institutions. This practice has certainly assisted in the better classification of the other patients here, and should result in good to the classes in question, as they will now be concentrated where more intensive methods of study and treatment can be applied. It is now to be hoped that at some early date the problem of the defective delinquent will be as effectually solved.

The work of the dentist has been somewhat amplified, and in addition to his regular work three weeks of intensive application have been devoted to the treatment of cases of Riggs' disease, an affection of the gums. In the course of this work an examination was made of the teeth of every patient in the house. Satisfactory results were obtained in the majority of cases.

Taunton State Hospital.

Opened in April, 1854. Present capacity, 1,209; increase for the year, 6.

Valuation of the plant, per capita of capacity, $754; real estate, $644; personal, $110.

Daily average number of patients under care, 1,294; in hospital, 1,240; in family care, 54; increase for the year, 92.

Number Oct. 1, 1915, 1,336; in hospital, 1,272; in family care, 64.

All commitments, 494; decrease for the year, 172.

Commitments as insane, 471; decrease for the year, 149.

First cases of insanity, 378; 80.25 per cent.

Voluntary admissions, 6.

Commitments as inebriate, 3.

Temporary-care admissions, 115.

First Cases of Insanity.

Native-born patients, 51.61 per cent.; mothers, 29.97 per cent.; fathers, 30.81 per cent.

Age sixty years or over, 20.86 per cent.

Residents in cities or large towns, 63.76 per cent.; country districts, 36.24 per cent.

Previous duration of insanity, under six months, 56.90 per cent.

Curable forms of insanity, 13.76 per cent.

Causes: congenital, 4.23 per cent.; hereditary, 19.32 per cent.; alcoholic, 17.20 per cent.; senility, 10.58 per cent.; coarse brain lesions, 4.76 per cent.; syphilis, 7.14 per cent.

Recoveries of the Insane.

Whole number, 52; 11.04 per cent. of commitments.

Recoveries of first cases of insanity, 47; 12.43 per cent. of first cases.

Recoveries in curable group A, 45; 86.54 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 166; 9.26 per cent. of whole number of persons treated.

Curable forms of mental disease present in 3.01 per cent.; tuberculosis in 12.65 per cent.; senile insanity in 27.71 per cent.; general paralysis in 16.27 per cent.; coarse brain lesions in 19.28 per cent.

Finances.

Expenditures from maintenance funds, $321,317; total receipts, $39,311; being $16,950 from private patients, $20,158 from reimbursing patients, $2,203 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.73; the same less repairs and improvements, $4.54.

Weekly per capita cost of whole service, $1.88; ward service, $0.78.

One person employed for every 4.07 patients; 1 nurse for every 7.62 patients.

Average monthly wage for all persons employed, $34.97; for nurses, $27.14; men, $29.88; women, $24.19.

Extract from Trustees' Annual Report.

The training school established in 1894 has been continued with splendid results. The innovation of women nurses upon male wards, a departure in which Taunton was one of the leaders, has been continued and enlarged with satisfactory effect. Attempts have been made by advertising nearer home to secure nurses, and an inquiry made during the summer showed that the gratifying total of 75 per cent. of the employees were residents of the United States previous to their employment. Further inquiry showed that nearly 75 per cent. of male employees are eligible as voters. By enlarging the opportunities offered, the trustees hope that even these percentages may be increased.

Attention has been directed this year toward enlarging the occupational and amusement opportunities of the patients. Taunton has been engaged in occupational work since 1854, and the records it has made attest its success. In 1910 there was 62 per cent. of the average daily number employed in some way; this year the percentage was 75.95. Gardening for the women patients at the Lovering Colony, the making of paper bags, and the making of "firemen's shawls" have added to the occupations for this year, and a continuous sale of the patients' handiwork is main-

tained at the hospital. A committee of the trustees is at work on the matter of recreation for the patients. These now include picnics, baseball games, lectures, dances and other entertainments. The trustees are informed that the Public Library trustees of the city of Taunton have voted to donate discarded books and periodicals to the hospital, and appreciate this interest in and thoughtfulness of the hospital problem.

The Board has paid special attention to the investigation of accidents, even more than required by law, and in the case of an unfortunate fatality during the year conducted an inquiry independent of the hospital staff or the legal officers of the State. Though every reasonable precaution is required at the hospital, the trustees believe that the further precaution is needed of having committing doctors state on the entrance blank the kind and extent of a physical examination they have given the patients before entrance. As a protection to the patient as well as the hospital, the trustees believe that this rule would obviate much of the difficulty encountered in some recently discussed cases.

Extract from Superintendent's Annual Report.

The graduating exercises of our training school for nurses were held on the evening of September 30, on which occasion 13 nurses — 11 women and 2 men — graduated.

During the year 17 women nurses completed their service of six months in the Boston City Hospital, and 19 women nurses completed their service of three months in the New York Nursery and Child's Hospital, New York City. Twenty-three graduates of our training school are in our employ at the present time.

Nine pupil nurses are serving their required periods in affiliated hospitals. We feel that our school is in a healthy condition, and that it is steadily making progress, but there are dangers to be avoided, the most dangerous and subtle of which is the tendency noticeable in some sister States to consider the hospital for the benefit of the training school instead of the reverse. Those who fall into this error forget that both doctor and nurse are merely the servants of the patient, and that it is only to enable them to properly discharge their duties as such servants that they are educated. In this connection it may be stated as self-evident and certainly true, that any change or requirement that lessens the care that the individual patient receives, or that tends to intrust that care to less competent hands, is a step backward.

In last year's report we stated that we felt "that family care, at least in this institution," was "in the experimental stage." With another year's experience behind us we now feel that family care has passed the experimental stage and is firmly established. In family care at the beginning of the year we had 31 patients, — 6 men and 25 women; we received by transfer 22 patients, — 3 men and 19 women; and close the year with 66 patients — 9 men and 57 women — in family care. We have been

hampered in the work by lack of proper facilities for transportation, which we hope will be corrected during the coming year. The work of the past year convinces us that in family care we possess a valuable means of treatment for properly selected cases.

The wisdom of employing women nurses on the men's wards has, we believe, been clearly demonstrated, and we have extended the system until all but one of the men's wards are managed by women nurses except at night. Further extension is planned to cover at least part of the night service. The normal number of nurses on the men's wards at present is 77, of whom 38 are women.

The clinics mentioned in last report have been continued throughout the year, 348 patients, including 62 former inmates of the hospital, having been examined. In addition to the clinics mentioned above, we have held, in co-operation with the Massachusetts School for the Feeble-minded, a monthly clinic for children at Fall River which has been fully attended, the results of which have been gratifying, as we have been able to give assistance in quite a number of cases. The question of establishing a similar clinic at New Bedford is under consideration at the present time. Our annual public clinic, for the benefit of the North Bristol branch of the Massachusetts Medical Society and the local Doctors' Club, was held in February, and was, as usual, well attended.

Nov. 16, 1915, was observed at our institution as "Newspaper Day," a notice to that effect, and an invitation to attend, being sent to every newspaper in our district. Representatives of 22 newspapers accepted the invitation, and after visiting all parts of the institution sat down to dinner, which was presided over by the chairman of our Board, Mr. C. C. Cain, Jr. After dinner brief addresses were made by Mr. Cain and the superintendent, after which late comers who did not arrive in time to visit the wards before dinner were conducted through the institution. It is hoped to make this an annual event, as we regard it of the greatest importance that the people at large should know what the State actually does and what it is trying to do for those under its care.

Northampton State Hospital.

Opened in August, 1858. Present capacity, 819.

Valuation of the plant, per capita of capacity, $1,295; real estate, $1,141; personal, $154.

Daily average number of patients under care, 944; in hospital, 917; in family care, 27; increase for the year, 23.

Number Oct. 1, 1915, 955; in hospital, 920; in family care, 35.

All commitments, 399; increase for the year, 13.

Commitments as insane, 384; increase for the year, 18.

First cases of insanity, 303; 78.91 per cent.

Voluntary admissions, 32.

Commitments as inebriate, none.

Temporary-care admissions, 71.

First Cases of Insanity.

Native-born patients, 59.14 per cent.; mothers, 34.25 per cent.; fathers, 33.22 per cent.

Age sixty years or over, 16.50 per cent.

Residents in cities or large towns, 74.26 per cent.; country districts, 25.74 per cent.

Previous duration of insanity, under six months, 45.66 per cent.

Curable forms of insanity, 26.40 per cent.

Causes: congenital, 16.50 per cent.; hereditary, 16.50 per cent.; alcoholic, 25.74 per cent.; senility, 9.90 per cent.; coarse brain lesions, 7.92 per cent.; syphilis, 3.96 per cent.

Recoveries of the Insane.

Whole number, 37; 9.64 per cent. of commitments.

Recoveries of first cases of insanity, 29; 9.57 per cent. of first cases.

Recoveries in curable group A, 23; 28.75 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 104; 7.77 per cent. of whole number of persons treated.

Curable forms of mental disease present in 15.38 per cent.; tuberculosis in 4.81 per cent.; senile insanity in 27.88 per cent.; general paralysis in 13.46 per cent.; coarse brain lesions in 23.08 per cent.

Finances.

Expenditures from maintenance funds, $207,660; total receipts, $52,908; being $34,904 from private patients, $16,141 from reimbursing patients, $1,863 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.19; the same less repairs and improvements, $3.99.

Weekly per capita cost of whole service, $1.70; ward service, $0.68.

One person employed for every 5.11 patients; 1 nurse for every 10.09 patients.

Average monthly wage for all persons employed, $38.78; for nurses, $30.79; men, $33.45; women, $27.95.

Extract from Superintendent's Annual Report.

One never-failing source of increase in our numbers is the yearly accumulation of patients who do not recover and who remain in the hospital. Of the patients in the hospital at the end of the year now being considered some were admitted as long ago as 1873, and eleven of them were admitted in the years prior to 1884. Some of the admissions of every year since 1884, a period of thirty-one years, still remain in the hospital. Hospital residence, where the patient's life and daily routine are well ordered, in sleeping, eating and personal hygiene, in exercise, occupation and recreation, conduces to a longer life than if the patient had remained in the community. Half of our population has lived here for more than three years, and in but a small proportion of these cases do we hope for recovery.

Our annual admissions for several years have averaged more than 400; for the past ten years the average number admitted annually has been 350. Assuming that there will not be fewer admissions this year, we may confidently make the following prediction, basing it on a study of our admissions and discharges for the past twenty-five years: There are now 350 persons in the four western counties of the Commonwealth who will be committed to the hospital within the next twelve months; of these, within the ten years following their admission, 78 will be discharged as recovered, 103 as improved, — some to go on to recovery and others to become self-supporting, — and 72 as not improved; 66 will die in the hospital, and 31 will still remain in the hospital at the end of the ten years.

It is this steady accretion of the undischarged that makes up the bulk of our population.

The excess in number of admissions each year over the number discharged has resulted in a condition of overcrowding. This overcrowding has extended over so long a period that we have come to accept it as the natural order of things; but this year it has been more serious than ever before. The hospital was planned to care for 250 patients. Since the original buildings were erected and occupied, accommodations have been provided from time to time for about 350 more patients. By measuring the floor space devoted to sleeping quarters for patients, a former State Board estimated our capacity at 820 patients. It was possible, however, for us to accommodate this number only by putting two beds into rooms intended to accommodate but one patient. We now have 82 single rooms

with two beds in each, the dormitories are crowded, and 140 patients are sleeping in corridors and day space.

To relieve this congestion somewhat the State Board of Insanity has within the past year transferred 80 patients to institutions in the eastern part of the State, but in spite of this our daily average number for the past year was 23 greater than ever before. Our beds are all occupied. To provide for the new patients that come new beds must be set up somewhere, and shifting of patients from one room to another or one ward to another is necessary, to the detriment of all the patients concerned, not to mention the extra burden imposed on the caretakers.

We have been seriously handicapped all the year by having too few nurses. So much has been said of our dependence upon our nursing service for success in the treatment of our patients, and so well understood is the need, that it seems unnecessary to speak of it again at length. Our request for a larger corps of nurses was refused by the Legislature of 1915. It is to be hoped that the coming Legislature will be more liberal in this respect. Of all the hospitals in the State that care for the insane, ours had the greatest ratio of patients to nurses in 1914, except one of the institutions for the care of the chronic insane; the average ratio throughout the State was 1 nurse to 7.44 patients; the Northampton Hospital has but 1 nurse for each 10.87 patients. During the year just ended we have had a ratio of 1 nurse to 10.34 patients, manifestly too small a number to care for our patients properly, and so small as to impose too long hours of service upon the nurses.

The scope of our service in the out-patient department has been greatly enlarged during the year, entailing more work and energy on the members of our staff, but, we have reason to believe, with corresponding appreciation on the part of the public that has noticed this service. It has benefited the community and has engendered a feeling of friendliness toward and confidence in the hospital.

There were 23 patients from our hospital in family care at the beginning of the year. Nineteen more were placed in families, making a total of 42 thus cared for during the year. Thirty-five remain in family care at the end of the year, supported as follows: 25 by the State, 5 by friends and 5 self-supporting.

Our assistant to the out-patient department or some other member of the staff made 139 visits to these patients to observe whether they were comfortable and well cared for. At these visits the patients were seen alone, being given opportunity to make complaints. Most of them appreciate the advantages of living in a private home. No patient complained of ill treatment, and only two had minor complaints that were due to misunderstandings that were easily adjusted.

Family care is an excellent thing when patients and families can be found to fit each other. It has been difficult at our hospital to find suitable cases for family care, because most of our patients have comfortable homes to go to as soon as they are well enough to leave the hospital.

Our assistant visited various towns in our district 152 times, usually seeing more than one patient or family on each trip. The occasions for these visits were to inspect homes that sought patients as boarders; to investigate home conditions of patients whose dismissal from the hospital was being considered; to advise relatives of the condition of patients at the hospital; to investigate the history of patients prior to their commitment to the hospital, as an aid to diagnosis and to complete case histories; to visit patients who were away from the hospital "on visit;" and to procure employment, if possible, or the co-operation of persons and agencies in the supervision of patients after dismissal from the hospital.

Clinics have been continued throughout the year at Springfield on the first and third weeks of each month, in Greenfield on the second week, and in Pittsfield on the fourth week.

At these, 289 first cases were seen, with a total of 319 cases; 54 of them were referred by physicians, 5 by hospitals, 4 by courts, 5 by schools and 35 came of their own accord, having seen a notice of the clinics in the newspapers.

Relatives of patients came frequently to make inquiries concerning them, to get acquainted with the physician, and to send messages to the patients. These visits have established a cordial feeling toward the hospital on the part of the public, who recognize the interest that has been taken in their behalf.

Frequent consultations have been held at the hospital, and numerous cases of backward or of feeble-minded children have been brought by the charitable associations to be examined by the Binet and Yerkes tests.

Our assistant has also seen a number of cases at her office, and has visited 47 persons at their own homes at the request of relatives or of the family physician. Not infrequently, also, she has been consulted by former patients who have been discharged, but who occasionally feel the need of advice or of encouragement.

Systematic use has been made of the two therapeutic measures, occupation and amusement, in the treatment of our patients. Mention of their value and of the extent of their use has been made in nearly every annual report of the hospital from the first, oftentimes at great length, till it would seem to be an old story; but to omit reference to them might indicate that but little value was attached to them, and it is surprising how few people in the State yet realize what is being done in such directions by the State hospitals.

In the way of employment the patients have helped in every department of the institution, — in the ward work, in dining rooms and kitchens, in the sewing and mending rooms, at the laundry, in the shops with carpenters, painters, masons, electricians and plumbers; and in large numbers on the farm, in the gardens, at the barns and stables. They make brooms, tinware, clothing, mattresses, bedding, do all the upholstering, cane seat chairs, do printing, knit garments, make preserves and the like. Several of the women have gardens that they tend, whose products

— flowers, fruits and vegetables — they have for the use of themselves and ward mates. Two instructors teach in basketry, weaving, rug making of all sorts, — braided, hooked, woven, tied and the like, — painting, embroidery and crocheting. These activities are carried on not only in the industrial room but on the wards, where the instructors give lessons to the nurses, that they in turn may teach the patients.

Successful exhibits of the work of patients have been made at the hospital, at the annual meeting of the American Medico-Psychological Association at Old Point Comfort, at the Conference of Charities in Pittsfield, at the Mental Hygiene Conference in Boston, and at the Three Counties Fair in Northampton. These exhibits attracted much attention, and were a source of pride to many of the patients who helped in preparing the articles exhibited.

Many of these activities are carried on solely as a therapeutic measure and at considerable expense, but the value cannot easily be estimated. The patients are made happier thereby, and convalescence is promoted. Many who have gone home recovered date the beginning of their recovery to the interest that was stimulated by these efforts.

Danvers State Hospital.

Opened in May, 1878. Present capacity, 1,343; decrease for the year, 1.

Valuation of the plant, per capita of capacity, $1,397; real estate, $1,266; personal, $131.

Daily average number of patients under care, 1,497; in hospital, 1,491; in family care, 6; increase for the year, 30.

Number Oct. 1, 1915, 1,508; in hospital, 1,496; in family care, 12.

All commitments, 624; increase for the year, 40.

Commitments as insane, 607; increase for the year, 40.

First cases of insanity, 477; 78.58 per cent.

Voluntary admissions, 36.

Commitments as inebriate, 3.

Temporary-care admissions, 155.

First Cases of Insanity.

Native-born patients, 58.28 per cent.; mothers, 34.14 per cent.; fathers, 33.77 per cent.

Age sixty years or over, 19.50 per cent.

Residents in cities or large towns, 85.32 per cent.; country districts, 14.68 per cent.

Previous duration of insanity under six months, 58.46 per cent.

Curable forms of insanity, 26.42 per cent.

Causes: congenital, 7.76 per cent.; hereditary, 9.02 per cent.; alcoholic, 17.61 per cent.; senility, 3.77 per cent.; coarse brain lesions, 15.09 per cent.; syphilis, 14.26 per cent.

Recoveries of the Insane.

Whole number, 37; 6.10 per cent. of commitments.

Recoveries of first cases of insanity, 25; 5.24 per cent. of first cases.

Recoveries in curable group A, 20; 15.87 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 183; 8.47 per cent. of whole number of persons treated.

Curable forms of mental disease present in 23.50 per cent.; tuberculosis in 8.20 per cent.; senile insanity in 17.49 per cent.; general paralysis in 21.86 per cent.; coarse brain lesions in 14.75 per cent.

Finances.

Expenditures from maintenance funds, $367,108; total receipts, $63,974; being $36,010 from private patients, $25,339 from reimbursing patients, $2,625 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.66; the same less repairs and improvements, $4.32.

Weekly per capita cost of whole service, $1.96; ward service, $0.72.

One person employed for every 4.72 patients; 1 nurse for every 8.76 patients.

Average monthly wage for all persons employed, $40.32; for nurses, $27.85; men, $31.43; women, $25.45.

Extract from Superintendent's Annual Report.

The medical work as outlined in previous reports has been continued, staff meetings being held daily at 8 A.M., Sundays and holidays excepted, at which the questions of diagnosis, prognosis and treatment of all cases admitted are considered, also the advisability of discharge. There has

been no serious epidemic during the year, and the general health of the patients has been very good.

During the year 4 persons were admitted with well-marked symptoms of pellagra. In 3 of these, typical cutaneous lesions and gastrointestinal disorders presented unmistakable pictures of the disease at the time of admission. Careful inquiry brought to light a history of long-standing ill health and mental and physical decadence in every case, before the appearance of the characteristic erythema. The pre-erythemal stages covered periods of two to five years. Malnutrition was a constant accompaniment of the disease in every case that came under our observation. Investigation showed in practically all cases an ill-balanced or defective diet. The chief lack, common to all the cases, was that of fresh meats. In all these cases the main part of the diet was white flour bread and canned foods. The improvement in physical condition, the clearing up of skin lesions, under a liberal special diet containing eggs, meats, beans and other legumes, seem to indicate a relation between food and the disease. Our experience supports Goldberger's theory of the dietary origin of pellagra. Two of our patients died, one after a hospital residence of three months and eighteen days; another after one month and fifteen days. The other two show well-marked physical improvement under a carefully regulated diet.

The work of the social service department for the year serves to emphasize the need for more workers. In the special report of the social service department, following the report of the clinical groups, it is pointed out that five social service workers could be used advantageously in an institution of this size and type, if the most is to be made of the opportunities as the social service work is now organized. It should be noted that the boarding out of patients, heretofore looked after by the State Board of Insanity, is now cared for by the hospital, thus imposing additional duties on the social service department.

Out-patient clinics, inaugurated by the State Board of Insanity last year and held monthly in Lawrence, Haverhill, Newburyport, Gloucester, Salem, Lynn and Malden, have been helpful in many ways, especially in bringing about a better understanding on the part of the public of the work of the hospital. It would materially assist the work of this department if a law were enacted permitting patients released from the hospital on trial visits to extend the period of their parole by reporting to an officer of the hospital at an out-patient clinic instead of returning to the hospital for this purpose.

While a great deal has been accomplished in occupation therapeutics, under the direction of the industry teacher, Mrs. A. L. Tompkins, and her assistants, the work is seriously hampered by the lack of suitable quarters. It is to be hoped that the Legislature will see fit to grant a special appropriation to erect a building in which this work, and such work as the making of brooms, brushes, mattresses, the repairing of furniture, weaving, upholstering, etc., may be properly carried on. Machinery has been pur-

chased for the manufacture of shoes. The industry shop continues under the able direction of Mr. Henry A. Turner.

Dr. J. Herman Haines continues to spend one day each week at the hospital in the examination and treatment of the teeth of our patients. It is thought that arrangements can be perfected whereby the services of a dental interne may be procured another year. There is sufficient work to occupy the entire time of a dentist.

Dr. Henry G. Carroll of Salem, Mass., ophthalmologist, has very kindly continued his visits to the hospital from time to time, and seen all patients referred to him by members of the staff.

Westborough State Hospital.

Opened in December, 1886. Present capacity, 1,161; decrease for the year, 32.

Valuation of the plant, per capita of capacity, $894; real estate, $752; personal, $142.

Daily average number of patients under care, 1,259; in hospital, 1,218; in family care, 41; increase for the year, 13.

Number Oct. 1, 1915, 1,303; in hospital, 1,241; in family care, 62.

All commitments, 566; increase for the year, 40.

Commitments as insane, 427; decrease for the year, 49.

First cases of insanity, 294; 68.69 per cent.

Voluntary admissions, 86.

Commitments as inebriate, 105.

Temporary-care admissions, 63.

First Cases of Insanity.

Native-born patients, 63.79 per cent.; mothers, 34.47 per cent.; fathers, 34.98 per cent.

Age sixty years or over, 21.03 per cent.

Residents in cities or large towns, 64.29 per cent.; country districts, 35.71 per cent.

Previous duration of insanity under six months, 39 per cent.

Curable forms of insanity, 23.47 per cent.

Causes: congenital, 4.08 per cent.; hereditary, 12.24 per cent.; alcoholic, 5.10 per cent.; senility, 9.86 per cent.; coarse brain lesions, 4.76 per cent.; syphilis, 6.46 per cent.

Recoveries of the Insane.

Whole number, 68; 15.89 per cent. of commitments.

Recoveries of first cases of insanity, 50; 17.01 per cent. of first cases.

Recoveries in curable group A, 35; 50.72 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 113; 6.65 per cent. of whole number of persons treated.

Curable forms of mental disease present in 9.73 per cent.; tuberculosis in 6.19 per cent.; senile insanity in 24.77 per cent.; general paralysis in 17.70 per cent.; coarse brain lesions in 15.93 per cent.

Finances.

Expenditures from maintenance funds, $341,256; total receipts, $74,284; being $57,392 from private patients, $14,992 from reimbursing patients, $1,900 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $5.11; the same less repairs and improvements, $4.92.

Weekly per capita cost of whole service, $2.29; ward service, $1.03.

One person employed for every 3.49 patients; 1 nurse for every 5.90 patients.

Average monthly wage for all persons employed, $36.15; for nurses, $27.66; men, $30.90; women, $23.84.

Extract from Superintendent's Annual Report.

Medical Activities.

In January the State Board of Insanity transferred the patients in family care to the supervision of the hospitals. This brought under our care some 40 patients, and we have added to that number until at the end of the year we have 66 patients in this group. It is interesting to note that in 1887 Dr. Paine, then superintendent of the hospital and now chairman of the Board of Trustees, strongly recommended this step in his annual report. There was some delay in starting this work, as it took some time to get a satisfactory knowledge of the various boarding places and their patients, and, further, we were delayed some two months in development by an epidemic of scarlet fever in the later part of the winter.

It is doubtful if our population will permit us to increase the number very materially, for we find that the patients returning about balance the number going out to this family life.

Our social service work has been hampered by difficulty in obtaining a satisfactory applicant to do the work and by resignations. Especially do we find the need of investigation of the environment from which a patient comes and to which a patient goes.

On Nov. 1, 1914, the State Board of Insanity transferred to this hospital all the female alcoholics and narcotic habitués under their care in the various hospitals. The following statistics for this group of cases is of interest: —

Admitted Nov. 1, 1914, to Nov. 1, 1915.

Alcoholics,	64
Narcotics,	81

Dismissed Nov. 1, 1914, to Nov. 1, 1915.

	Alcoholics.	Narcotics.
Furloughed,	36	61
Discharged,	4	3
Escaped,	4	2
Died,	-	2
Deported,	-	1
Totals,	44	69

Average Duration in Hospitals of Court Cases.

	Alcoholics.			Narcotics.		
	Years.	Months.	Days.	Years.	Months.	Days.
Furloughed,	-	5	28	-	3	8
Discharged,	1	7	8	2	-	-
Escaped,	-	10	2	-	7	20
Died,	-	-	-	-	-	22
Deported,	-	-	-	1	2	3

Average Duration in Hospital of Voluntary Cases.

	Alcoholics.		Narcotics.	
	Months.	Days.	Months	Days.
Furlough,	1	7	-	24

Average Duration in Hospital of All Cases.

Alcoholics,	1 year, 4 days
Narcotics,	10 months, 4 days

Note. — Duration includes times in other hospitals of transferred cases under this commitment.

Commitments for the Year.

	Alcoholics.	Narcotics.
Number of first commitments,	49	78
Number of second commitments,	7	3
Number of third commitments,	5	-
Number of fourth commitments,	2	-
Number of fifth commitments,	1	-
Number of individuals furloughed once,	33	56
Number of individuals furloughed twice,	2	1
Number of individuals furloughed three times,	-	1
Number of individuals furloughed five times,	1	-

Average duration of furlough in cases returned: alcoholics, two months, fourteen days; narcotics, three months.

It will be noted that the purely voluntary cases remained in the hospital but a very short time; especially do the narcotic cases leave after a few days' stay. It is not unusual for them to want to leave in less than a week. To spend effort in trying to assist patients who have used narcotics for years only to have them leave in a week, almost before we can entirely discontinue the drug, is discouraging and a waste of labor. It makes a farce of the whole treatment. If these cases are to be taken without court commitment it would seem that the period of voluntary commitment should be materially longer. The grouping of the two classes, court and voluntary commitments, in one ward creates much dissatisfaction. The court case having gone to the court practically of her own volition or as the result of advice given her, she feels that she is a voluntary patient, as well as the woman who omits court proceedings and comes directly to us. In the court case we can hold the patients a period of time "not exceeding two years;" in the other case not more than three days after they notify the superintendent, in writing, that they wish to leave.

Industrial work, so called, has progressed materially during the past year. Male ward No. 8, which was not satisfactory for dormitory purposes, was taken for an industrial room, and while it helps that department it has reduced our accommodations some 20 beds. We are now

making all of our brooms, carpets, door mats, besides having a surplus to dispose of, and doing some work in weaving. There are two classes in pottery, and the purchase of a kiln has given much impetus to the work. We have also continued to work in the wards with other forms of handicraft, and to do the plain sewing and utilitarian tasks of the institution. We have to be on guard all of the time in doing the class of work popularly known as "arts and crafts" lest we be diverted from the real object of the industrial effort, namely, the improvement and welfare of the patients, and seek for quantity and quality of work rather than numbers and improvement of patients.

During the past year we have had resident 20 senior students from Boston University School of Medicine, each remaining at least five weeks, one staying two months during the summer. We hope and believe that this has been beneficial to the students, and we know that it has been a stimulus to each member of the staff. This work is a recognized undergraduate course at the Boston University School of Medicine, and in connection with this we have arranged a postgraduate course of three months, which has also been recognized by the State Board of Insanity as a training course for applicants for the position of assistant phvsician in this hospital.

The dentist, Dr. E. P. Brigham of Westborough, has continued his visits twice each week during the past year.

Last February four patients and five nurses contracted scarlet fever of a mild type. All cases were light and without serious results. We invited the assistance of the State Department of Health, but the source of the infection could not be absolutely ascertained.

Boston State Hospital.

Opened in December, 1839. Present capacity, 1,406.

Valuation of the plant, per capita of capacity, $2,101; real estate, $1,993; personal, $108.

Daily average number of patients under care, 1,535; in hospital, 1,528 (insane, voluntary sane and inebriate, 1,493; temporary care, 35); in family care, 7; increase for the year, 192.

Number, Oct. 1, 1915, 1,587; in hospital, 1,577 (insane and voluntary sane, 1,534; temporary care, 43); in family care, 10.

All commitments exclusive of temporary care, 1,317; increase for the year, 65.

Commitments as insane, 1,237; increase for the year, 282.

First cases of insanity, 1,008; 81.49 per cent.

Voluntary admissions, 578.

Commitments as inebriate, none.

Temporary-care admissions, 1,601.

First Cases of Insanity.

Native-born patients, 52.63 per cent.; mothers, 26.48 per cent.; fathers, 25.19 per cent.

Age sixty years or over, 17.06 per cent.

Residents in cities or large towns, 94.35 per cent.; country districts, 5.65 per cent.

Previous duration of insanity under six months, 45.26 per cent.

Curable forms of insanity, 23.51 per cent.

Causes: congenital, 2.48 per cent.; hereditary, 16.57 per cent.; alcoholic, 15.77 per cent.; senility, 13.79 per cent.; coarse brain lesions, .79 per cent.; syphilis, 13 per cent.

Recoveries of the Insane.

Whole number, 117; 9.46 per cent. of commitments.

Recoveries of first cases of insanity, 84; 8.33 per cent. of first cases.

Recoveries in curable group A, 68; 28.69 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 203; 7.64 per cent. of whole number of persons treated.

Curable forms of mental disease present in 6.40 per cent.; tuberculosis in 5.91 per cent.; senile insanity in 18.23 per cent.; general paralysis in 22.66 per cent.; coarse brain lesions in 32.02 per cent.

Finances.

Expenditures from maintenance funds, $474,517; total receipts, $43,823; being $24,998 from private patients, $16,098 from reimbursing patients, $2,727 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $5.82; the same less repairs and improvements, $5.68,

Weekly per capita cost of whole service, $2.64; ward service. $1.15.

One person employed for every 3.36 patients; 1 nurse for every 5.87 patients.

Average monthly wage for all persons employed, $38.74; for nurses, $29.39; men, $32.34; women, $26.64.

Extract from Trustees' Annual Report.

Widening of Harvard Street.

By chapter 91 of the Special Acts of 1915 the city of Boston was authorized to take such portion of the land belonging to the hospital as was needed for straightening and widening Harvard Street. The change in the course of the street left a small triangular lot between the new street line and the hospital property, and with the approval of the trustees the State Board of Insanity acquired this land for the Commonwealth, so that the hospital property again extends to the street line.

The Psychopathic Department.

The usefulness of the Psychopathic Department as a hospital for the first care and treatment of patients in the metropolitan district continues to be demonstrated. The demands upon the department have increased both in the number of patients seeking its assistance and in the new classes of cases calling for its consideration. A much larger appropriation might be spent with great profit to the Commonwealth. The trustees have given unusual attention the past year to the form of organization and administration of this department. The duties of the director, in connection with his office of pathologist of the State Board of Insanity, and in the direction of the scientific investigations of the department, as well as in various useful public services, have increased to such an extent that it was deemed desirable to relieve him of the immediate oversight of administrative details, and for this purpose the office of administrator was established and was filled by the appointment of Dr. Elisha H. Cohoon, formerly of the Rhode Island State Hospital at Howard, R. I.

Extract from Superintendent's Annual Report.

Administration.

The problems of this year were less complex than usual, owing to the fact that no new buildings were under construction. The chief difficulty experienced was one which, unfortunately, is not new in hospital administration, — to find room for patients admitted in excess of the proper capacity of the wards. Our quarters are overcrowded now, and this condition cannot be relieved until additional accommodations are provided. Meanwhile, to a greater extent than heretofore, patients residing in Boston are being committed to hospitals at a distance, which is a hardship to them and to their families.

An addition to the medical staff is needed to meet these unusual demands and others which present-day standards of diagnosis and treatment have created. A specimen of blood for the Wassermann test for syphilis is obtained from each new patient admitted, and spinal fluid, in addition,

from a large number. In connection with the work of Dr. Harry C. Solomon, appointed by the State Board of Insanity to conduct a research on syphilis, the treatment of a series of cases with salvarsan has been undertaken at this hospital. Following the provision of adequate equipment for surgical work, which was noted the past two years, there has been a marked increase in the number of operations performed, for which we are mainly indebted to Dr. Irving J. Walker, attending surgeon, who has given his services most generously for the benefit of our patients. Both the medical and the nursing staff are stimulated and helped by the addition to their mental hospital routine of these general hospital features. The following is a list of the more important surgical operations performed: —

Hernia, femoral (strangulated),	1
Hernia, inguinal,	2
Hernia, umbilical,	1
Cancer of liver, exploration,	1
Carcinoma of breast,	1
Epithelioma of lip,	1
Sarcoma, posterior mediastinum,	1
Tumor, benign,	2
Thoracentesis,	1
Abscess of lung, resection of rib,	1
Glands, cervical, removal of,	1
Sigmoidectomy,	1
Trachelorrhaphy,	1
Varicose veins,	4

Dr. Walter J. Whelan has continued his service as dentist to the institution, assisted by Mr. (now Dr.) Ronald Rankin, a dental student filling a position as attendant in the hospital.

Social Service.

Our second year with organized social service as an aid to the medical work, especially in the after-care of patients discharged on trial, was completed July 1. The records show 620 cases given attention during the two years by the social worker and her occasional assistants, of which number 347 were cases supervised after leaving the hospital. Two hundred and eighty-eight of these patients were discharged at the end of the trial period, 46 were returned to the hospital, and 13 were still under supervision. The service is most valuable, but its possibilities are merely indicated — not realized — by the single worker so far available. At least one regular assistant is urgently needed, in part for the family-care group, which otherwise can only grow at the expense of other divisions of the work we are now attempting to do with an insufficient force.

Extract from Director's Annual Report (Psychopathic Department).

In the body of this report note is made of the continued and increasing success of the institution in attracting increasing numbers of patients, both house patients and out-patients. A measure of great importance to the proper classification and treatment of many non-committable cases is the amendment to the temporary-care law mentioned below, in accordance with which temporary-care cases are admitted for a period of ten days (chapter 174, General Acts of 1915) instead of seven days, as under the now obsolete chapter 395, Acts of 1911.

Temporary-care Statistics for the Year.

	Males.	Females.	Totals.
Patients remaining Oct. 1, 1914,	15	18	33
Admissions from Oct. 1, 1914, to Sept. 30, 1915,	841	760	1,601
Viz.: chapter 504, Acts of 1909, section 34,	7	6	13
chapter 504, Acts of 1909, section 43,	21	17	38
chapter 504, Acts of 1909, section 42,	7	14	21
chapter 307, Acts of 1910,	287	159	446
chapter 174, General Acts of 1915,	519	564	1,083
Whole number of cases within the year,	856	778	1,634
Discharges from Oct. 1, 1914, to Sept. 30, 1915,	840	751	1,591[1]
Viz.: recovered,	53	17	70
improved,	71	38	109
unimproved,	131	129	260
died,	12	12	24
not insane,	133	143	276
voluntary to Boston State Hospital,	73	94	167
committed to Boston State Hospital,	238	221	459
committed to Danvers State Hospital,	19	10	29
committed to Worcester State Hospital,	11	12	23
committed to Westborough State Hospital,	16	18	34
committed to Taunton State Hospital,	5	2	7
committed to Tewksbury State Hospital,	1	-	1
committed to Monson State Hospital,	7	3	10
committed to Medfield State Hospital,	30	28	58
committed to McLean Hospital,	7	2	9
committed to Norfolk State Hospital,	4	-	4

[1] Of the discharges, 6 males and 9 females were discharged to the Immigration Department.

	Males.	Females.	Totals.
Discharges — *Con.*			
Viz.: committed to Northampton State Hospital,	1	1	2
committed to Foxborough State Hospital,	15	10	25
committed to Dr. Mellus' Sanitarium,	1	–	1
committed to Wrentham School,	1	–	1
committed to Ring's Sanatorium,	1	–	1
committed to Wiswall's Sanitarium,	–	1	1
committed to Highland Hall Sanitarium,	–	1	1
committed to Dr. Bessey's Sanitarium,	1	–	1
returned to main hospital,	1	5	6
returned to Danvers State Hospital,	1	1	2
returned to Medfield State Hospital,	4	–	4
returned to Monson State Hospital,	–	1	1
returned to Worcester State Hospital,	1	1	2
returned to Westborough State Hospital,	1	–	1
returned to Grafton State Hospital,	1	1	2
Patients remaining Oct. 1, 1915,	16	27	43
Daily average of temporary-care cases,	18.77	16.75	35.52

Problems of Hospital Management.

Commendable further progress has been made in working out the principles of the Psychopathic Hospital management. The uniqueness of our problem is not understood even by specialists in the field, as is sufficiently emphasized by countless inquiries made by medical and administrative officers from all parts of the country. Hence, as in previous reports, it seems worth while to throw these problems into as clear relief as possible.

The Psychopathic Hospital in Boston must be classed with institutions dealing with cases that are not legally insane, a large fraction of which may never be adjudged insane in the sense of the judge of probate. The State of Massachusetts and the city of New York have apparently the only governmental systems for handling the temporary-care group, which forms the major part of the problem of the Psychopathic Hospital in Boston. In particular, the work of the Psychopathic Hospital in Boston and that of the psychopathic ward of Bellevue Hospital in New York is identical. The State of Massachusetts has, however, added to the devices for handling temporary-care cases several other factors of the greatest importance in mental hygiene. The Psychopathic Hospital attracts great numbers of voluntary admissions, who are in many instances never committed and in many instances not even conceivably committable from the standpoint of the judge of probate.

Another factor of service in mental hygiene is the out-patient department, which not only receives many cases from public, semi-public and private sources, but also many cases resorting on their own initiative, for classification and treatment. An important feature of this out-patient situation is that only about one in four of these out-patient cases is found to be a hospital case, in the sense of a person needing prolonged examination or safekeeping in the wards. Besides providing facilities for the temporary-care group, the voluntary group and the varied out-patient group of patients, the Commonwealth of Massachusetts has provided facilities which make the Psychopathic Hospital a center of instruction and investigation. The State Board of Insanity has appointed special officers, working largely from the Psychopathic Hospital as a base of operations, which appointments have added much to the scope of the Psychopathic Hospital in mental hygiene, social service, graduate and undergraduate medical instruction and investigation. In fact, the Commonwealth of Massachusetts has in this regard taken one of the most advanced positions to be found in any State of the Union. Similar conditions are to be found only in a few States, *e.g.*, New York, Michigan, Illinois and the District of Columbia. In other States, at the present time, the general psychiatric or psychopathic situation is either undeveloped or has been developed more or less irregularly by the enterprise of a few men only.

The multiplicity of tasks indicated in the above paragraphs rendered it certain from the outset that an increasing amount of work would fall upon the heads of the institution. Happily, arrangements were finally consummated, taking effect on Aug. 21, 1915, by which an administrator was appointed, namely, Dr. Elisha H. Cohoon, who came from an extensive State hospital experience, culminating in work of special interest in the psychopathic ward of the Rhode Island State Hospital, to take a position at the Psychopathic Hospital, in many respects not secondary to that of any post in the whole State hospital system. This appointment at once freed the director from multifarious duties which had been carried on to the detriment of more specialized work in classification, treatment and hygiene of mental diseases.

Grafton State Hospital.

In accordance with chapter 79 of the General Acts of 1915, the name of this institution was changed from Worcester State Asylum to Grafton State Hospital, and the institution made a receiving hospital for the insane.

Opened in October, 1877. Present capacity, 1,570; increase for the year, 237.

Valuation of the plant, per capita of capacity, $1,211; real estate, $1,113; personal, $98.

Daily average number of patients under care, 1,459; in hospital, 1,442; in family care, 17; increase for the year, 95.

Number Oct. 1, 1915, 1,614; in hospital, 1,587; in family care, 27.

Deaths of the Insane.

Whole number, 90; 5.20 per cent. of whole number of persons treated.

Curable forms of mental disease present in 3.33 per cent.; tuberculosis in 28.89 per cent.; senile insanity in 5.56 per cent.; general paralysis in 5.56 per cent.

Finances.

Expenditures from maintenance funds, $359,479; total receipts, $13,796; being $233 from private patients, $11,883 from reimbursing patients, $1,680 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.58; the same less repairs and improvements, $4.35.

Weekly per capita cost of whole service, $1.83; ward service, $0.65.

One person employed for every 4.20 patients; 1 nurse for every 9.33 patients.

Average monthly wage for all persons employed, $33.97; for nurses, $26.89; men, $28.40; women, $24.26.

Extract from Trustees' Annual Report.

The trustees of the Grafton State Hospital, recently appointed, held their first meeting for organization at the office of the State Board of Insanity, Boston, on Nov. 9, 1915, since which time we have visited the asylum at Summer Street, Worcester, and the colony at Grafton.

We have been carefully studying the many problems with which we have to deal, as to the wisest method of properly caring for the wards, satisfying their relatives and friends as well as the public, and at the same time carrying on the work of extending and completing the colony in the most substantial and economical manner.

We find that under section 2, chapter 679 of the Acts of 1912, the trustees were required to transfer 400 patients from the Worcester State Asylum to the Grafton Colony. This act, as amended by chapter 170 of the General Acts of 1915, requires the trustees to transfer the patients from the Worcester State Asylum to Grafton not later than Jan. 1, 1917; and as our resources at both institutions will be taxed to the utmost to

care for the additional patients assigned to us by the State Board of Insanity, it will not be possible to comply with this law, and a further extension of time will be necessary unless arrangements are made to transfer the patients at Summer Street, Worcester, to some institution other than Grafton.

Extract from Superintendent's Annual Report.

In conformance to the laws of the Commonwealth, allow me to present to you for your consideration the thirty-eighth annual report of the Grafton State Hospital and its colony, which before March 18, 1915, was known as the Worcester State Asylum.

The work done out of doors this year has been most marked, a larger number of patients, about 57 per cent. of the men and about 12 per cent. of the women, being employed. The work done by the male patients has been better and more progressive than at any time. This has reduced much of the excitement and violence on the different wards, while the patient has been greatly benefited both mentally and physically. The garden work accomplished by the female patients was equal to that of last year. The cleaning-up crew on the female side was smaller on account of the indoor industrial activities. The percentage of male patients working out of doors was nearly doubled compared to that of last year, the patients being employed in the wheelbarrow crews, grading, building roads and cleaning up land for agrarian purposes. Only a small number of patients could be engaged for immediate farming because of their inability to properly interpret their duties when a certain amount of discrimination and care was necessary.

The industrial work has made great progress. Our industrial instructor has been most active in disseminating methods of occupation among the nurses as well as the patients. The number of patients working in the industrial rooms in Worcester and at the colony has been almost doubled; the quality of their productions has been improved. The contagion has been carried to the wards, where many more patients have been occupied in a more extensive and diversified way, and perhaps more intricate work has been done. Much more clothing has been made. The nurses have been more interested in getting patients interested in doing something worth while than has been the case in previous years.

The social service work was more extensive and productive than in previous years. Many hundreds of visits were made to investigate homes previous to sending patients home on a visit, to find a place for the boarding-out cases, or to visit those patients located in the different homes in the districts allotted to us by the State Board of Insanity. There is no doubt that the social service work is an invaluable aid in placing us more in touch with the public. We have found that the boarding-out patients have received attention and care which have fostered a comfortable and contented mental attitude, and proved them capable of being benefited

by home surroundings. This work is most desirable and is to be extended. We have been gratified to learn that in several instances our patients have been able to become practically or wholly self-supporting under careful supervision.

The course of our training school for nurses has been changed from two to three years, which has been done to comply with the requirements of the Red Cross Society of America. The number of lectures has been greatly increased. Nine months of the third year of the nurse's time will be spent in the Bellevue and allied hospitals in New York, with which we are now affiliated. Eight of our graduates and undergraduates are taking this course at the present time. The course of lectures and demonstrations given by our industrial teacher has been doubled; the lectures on dietetics given by the matron have been increased. She is assisted by our dietitian located at the female group of the colony. This course has been extended to the culinary departments as well. The male nurses receive instruction which, as in other years, is obligatory. In this way we feel that all our nursing force is receiving instructions as to their duties and care of the patients. To make the work more effective and our training school more stable I believe that the number of nurses should be increased. Last year we had 1 nurse to every 8.95 patients. I believe that the number of patients should be reduced to 7 or 8 instead. This will help increase the stability, violence and accidents can be more easily prevented, and the general nursing and care improved.

Regular weekly and semi-weekly staff meetings with daily conferences have been held throughout the year. At these conferences the condition of patients who are about to be discharged or are well enough to go home, as well as the diagnoses of new cases, is discussed.

We have opened a social center at Colony No. 1 in the assembly room of the dormitory, where all employees, attendants and nurses, male and female, can come together any evening from 8 to 10.30 o'clock for a social time. A number of whist parties and social evenings have been spent together with much pleasure to all. I believe the place can be made more attractive by the removal of the patients from the dormitory, and this part appropriated for the use of dancing and other forms of recreation and amusement for the employees. They should have a place they could go to at any time, day or evening, when off duty, which would help to keep them at home and more or less contented. Such a place as this has been contemplated for some time, but to be located in our recreation hall and chapel when it will be forthcoming.

The weekly dances, both at the main institution and at the colony, have been held. Monthly entertainments have been given, either by local or outside talent. A training class in dancing has been established for the patients. These are held every week here, and bimonthly at the colony, by the new director or teacher of music and dancing. These gatherings are greatly enjoyed by both the patients and nurses.

Medfield State Hospital.

Opened in May, 1896. Present capacity, 1,542.

Valuation of the plant, per capita of capacity, $1,105; real estate, $991; personal, $114.

Daily average number of patients under care, 1,648; in hospital, 1,624; in family care, 24; decrease for the year, 26.

Number Oct. 1, 1915, 1,677.

All commitments, 112.

Commitments as insane, 110.

First cases of insanity, 80; 72.73 per cent.

Voluntary admissions, 3.

Commitments as inebriate, 1.

Temporary-care admissions, 1.

First Cases of Insanity.

Native-born patients, 32.05 per cent.; mothers, 14.47 per cent.; fathers, 16.88 per cent.

Age sixty years or over, 11.25 per cent.

Residents in cities or large towns, 95 per cent.; country districts, 5 per cent.

Previous duration of insanity under six months, 41.67 per cent.

Curable forms of insanity, 11.25 per cent.

Causes: congenital, 11.25 per cent.; hereditary, 18.75 per cent.; alcoholic, 40 per cent.; senility, 3.75 per cent.; coarse brain lesions, 8.75 per cent.; syphilis, 8.75 per cent.

Recoveries of the Insane.

Whole number, 4; 3.64 per cent. of commitments.

Recoveries of first cases of insanity, 3; 3.75 per cent. of first cases.

Recoveries in curable group A, 3; 33.33 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 98; 5.31 per cent. of whole number of persons treated.

Curable forms of mental disease present in 10.20 per cent.; tuberculosis in 16.33 per cent.; senile insanity in 10.20 per cent.; general paralysis in 2.04 per cent.

Finances.

Expenditures from maintenance funds, $384,209; total receipts, $13,390; being $13 from private patients, $8,410 from reimbursing patients, $4,967 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.41; the same less repairs and improvements, $4.30.

Weekly per capita cost of whole service, $1.94; ward service, $0.96.

One person employed for every 4.20 patients; 1 nurse for every 7.63 patients.

Average monthly wage for all persons employed, $36.13; for nurses, $32.52; men, $36.16; women, $26.03.

Extract from Trustees' Annual Report.

Ninety per cent. of the patients are in need of dental treatment. The present and past attempts to cope with these conditions by employing a salaried visiting dentist have been inadequate and relatively far more expensive than would be the employment of a resident dentist.

At the present time there is an unusually favorable opportunity to purchase a parcel of land lying between the hospital's western boundary and the Charles River. In addition to requiring this land for pasturage at present, a very strong reason for acquiring it is that it threatens to become a serious menace to the hospital's interests, because of the proposed construction on said land of small "camps" or shacks for a class of occupant who has caused trouble by rowdyism, trespass and interference with patients, particularly women patients. The trustees recommend its immediate purchase.

Extract from Superintendent's Annual Report.

In January the boarded-out cases in this district in family care were placed in our charge by the State Board of Insanity. These have been supported and looked after by this hospital since then. Several were brought in for sickness, and new ones have been placed in the same or in

other families, so that the number boarded out remains about the same. It will be possible to increase this number during the coming year.

A moving-picture apparatus has been bought to furnish entertainment for the patients.

Training School for Nurses.

A class of nine young women and one man graduated on Oct. 7, 1915. The young women are now in New York, receiving further instruction in general hospitals. This is necessary to give them the knowledge and experience required for registration as nurses.

I expect further benefit to the nursing service when the new provisions contemplated by the State Board of Insanity, for standardizing the different training schools for nurses throughout the State, are carried out.

Gardner State Colony.

Opened in October, 1902. Present capacity, 711.

Valuation of the plant, per capita of capacity, $939; real estate, $793; personal, $146.

Daily average number of patients under care, 755; in colony, 737; in family care, 18; increase for the year, 51.

Number Oct. 1, 1915, 760; in colony, 730; in family care, 30.

Admitted by transfer, 58; decrease for the year, 36.

Deaths of the Insane.

Whole number, 7; .88 per cent. of whole number of persons treated.

Curable forms of mental disease present in 14.29 per cent.

Finances.

Expenditures from maintenance funds, $166,665; total receipts, $2,538; being $1,357 from reimbursing patients, $1,181 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.19; the same less repairs and improvements, $3.94.

Weekly per capita cost of whole service, $1.67; ward service, $0.54.

One person employed for every 5.33 patients; 1 nurse for every 11.92 patients.

Average monthly wage for all persons employed, $39.74; for nurses, $28.90; men, $30.82; women, $21.80.

Extract from Superintendent's Annual Report.

It was the purpose of the colony when founded, and has been our aim since, to have the patients assist as far as possible in their own support. A daily average of upwards of 90 per cent. have been occupied, and have to a greater or less degree assisted in such support.

Diversion and Recreation.

The usual diversions such as are practiced in all institutions have been continued. Dancing is probably the most popular. A special effort has been made to provide more out-of-door recreation, especially for the women, consisting of rides, picnics and parties, while many have attended near-by fairs, circuses and the like. On three evenings during the summer outdoor moving pictures were much enjoyed by the patients. Each holiday has been suitably observed, the two most enjoyed being the Fourth of July and Christmas. We this year provided what proved to be a much more interesting day than any, — an annual cattle show and fair day. Fifteen committees elected by the officers themselves arranged and carried through the following program, with the aid of patients: —

Morning parade of decorated floats.
Contests between draft horses, oxen, plowing matches, etc.
Athletic events.
Twenty Midway attractions.
Dinner served in large tent on lawn.
Ball game, State Colony v. Hubbardston Athletic Association.
Athletic events continued.
Exhibits of industrial work, cooking, preserves, etc., live stock, vegetables, etc. (prizes awarded in each entry).
Old-fashioned farmers' costume ball in the evening for employees, with an oyster supper.

The general public in the past has known but little of the operation of its institutions, but has been influenced too often unduly by criticism of them. We early felt that one of the best methods of enlisting general interest in hospitals for the insane would be to present something to them of a practical nature, — something that might serve as a connecting link. In 1908 an exhibit was arranged and sent to two county fairs, after which it was placed permanently in a room at the colony and opened to visitors. Enlarged and varied, it has been sent each year since to an increasing number of public meetings. This year it has been exhibited in nine different places, while four other requests have been refused because of conflicting dates. This I believe shows an increasing active interest in our institutions, which cannot fail in my opinion to result in a growth of confidence, which is the thing now most needed in our public institutions. We have declined to sell articles at these exhibits, although requests to purchase have been numerous, feeling strongly that so far as possible articles should be made that can be used by this or some other institution, and the exhibit used only for educational purposes.

Mental Wards, State Infirmary.

Opened in October, 1866. Present capacity, 673.

Daily average number of patients, 715; decrease for the year, 7.

Number Oct. 1, 1915, 709.

Commitments as insane, 42; decrease for the year, 13.

First cases of insanity, 31; 73.80 per cent.

Admitted by transfer, 48; decrease for the year, 17.

First Cases of Insanity.

Native-born patients, 32.26 per cent.; mothers, 16.13 per cent.; fathers, 10 per cent.

Age sixty years or over, 32.26 per cent.

Resident in cities or large towns, 93.55 per cent.; country districts, 6.45 per cent.

Previous duration of insanity under six months, 9.68 per cent.

Causes: hereditary, 12.90 per cent.; alcoholic, 16.13 per cent.; senility, 32.26 per cent.; coarse brain lesions, 3.23 per cent.; syphilis, 22.58 per cent.

Deaths of the Insane.

Whole number 63; 7.54 per cent. of whole number of persons treated.

Curable forms of mental disease present in 7.94 per cent.

Tuberculosis was present in 12.70 per cent.; senile insanity in 26.98 per cent.; general paralysis in 4.76 per cent.; coarse brain lesions in 3.17 per cent.

Extract from Superintendent's Annual Report.

Another year has passed without the necessity of resorting to restraint or seclusion in the treatment of the cases in the department for the insane. The work of the kindergarten teacher referred to in the previous report continues to be of benefit, especially in taking the untidy demented patients, who have been sitting around without interest in anything, and having them march to music, play games such as bean bag, or passing a ball back and forth, hopping, skipping and dancing. By doing these

things with this special class of patients, it is demonstrated that we are able to stimulate their interest until later on they are able to carry on some useful employment. In fact, some of this type have been induced to sew on useful articles, even though the needles have to be threaded for them. One patient who had been in the untidy ward for many years is running a sewing machine to-day, and is continuously at it, and although she does not speak she is doing competent work, but, of course, requires direction. The work in the industrial rooms of the department for the insane has continued to give satisfactory results, but especially have general sewing and making of clothing increased on the wards. A graduate of the industrial arts department of the normal school has been put in charge of one of the industrial rooms to direct in art and in domestic science lines. Although we have not boarded out any of our patients during the year, when the friends of the patient, or others interested, without expense to the State, have expressed the desire to take the patients home for visits or longer stays, it has been encouraged whenever it has been considered practicable, after one of the nurses has visited the homes to ascertain the fitness of conditions and surroundings, and if favorable the patient has been allowed to go on a trial visit. These cases have later been visited frequently and their condition noted, and friends and relatives have been encouraged to bring them back to report before the end of six months' trial so that in case of return of the symptoms they could be brought back to the hospital without the necessity of further legal procedure in the way of commitment.

Bridgewater State Hospital.

Opened in September, 1886. Present capacity, 818.

Daily average number of patients, 808; increase for the year, 15.

Number Oct. 1, 1915, 822.

Commitments as insane, 93; increase for the year, 5.

First cases of insanity, 74; 79.57 per cent.

Admitted by transfer, 4; decrease for the year, 3.

First Cases of Insanity.

Native-born patients, 35.14 per cent.; mothers, 12.16 per cent.; fathers, 13.51 per cent.

Age sixty years or over, 5.56 per cent.

Resident in cities or large towns, 83.78 per cent.; country districts, 16.22 per cent.

Previous duration of insanity under six months, 16.33 per cent.

Curable forms of insanity, 10.81 per cent.

Causes: congenital, 13.51 per cent.; hereditary, 21.62 per cent.; alcoholic, 28.38 per cent.; senility, 2.70 per cent.; coarse brain lesions, 2.70 per cent.

Recoveries of the Insane.

Whole number, 14; 15.05 per cent. of commitments.

Recoveries of first cases of insanity, 7; 9.46 per cent. of first cases.

Recoveries in curable group A, 3; 37.50 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 21; 2.39 per cent. of whole number of persons treated.

Curable forms of tuberculosis in 19.05 per cent.; senile insanity in 9.52 per cent.; general paralysis in 14.29 per cent.; coarse brain lesions in 23.81 per cent.

Extract from Medical Director's Annual Report.

Two years ago an increase of wages for attendants, to be based on experience, qualifications and length of service, was recommended and subsequently adopted. Under this scale, now in operation something over one year, we have been enabled to discriminate more carefully in our selections. The results thus far appear to justify the means. More mature and experienced men have been secured in place of the hospital "rounder," who has in part been eliminated. During the year just closed there have been nearly 30 per cent. less changes in the personnel of the hospital employees. The average age of those now in the service is 36.4 years and 67.8 per cent. have had previous experience in this or other hospitals. The demands made upon the patience, tact, judgment, self-control and oftentimes courage of the attendant are without limit. Maturity tends to develop such qualities. The physician may direct the care and treatment, and the attendant or nurse may aid and assist or nullify his best efforts. It is a pleasure to acknowledge the co-operation and spirit, so essential for the proper care of the insane, shown during the year by those whose duties bring them in direct and personal contact with trying conditions and minds warped by disease.

In accordance with the policy of the State Board of Insanity to extend the work of the hospitals, an out-patient clinic has been held at the Brockton Hospital once in two weeks since February. The purpose of

the clinic is to furnish examination, advice and treatment so far as possible to pre-hospital and non-hospital cases; the diagnosis of the feeble-minded, the examination of special cases for courts, physicians, social agencies, and follow-up work of discharged cases.

Industrial and diversional occupation has been encouraged, out-of-door work being the first choice of practically all patients. In addition to the usual farm work, the outside workers have reclaimed about 12 acres of land lying north of the institution. Those employed in the walled enclosure have raised fruits and vegetables, which have been served on the tables in their seasons.

Monson State Hospital.

Opened in May, 1898. Present capacity, 968; decrease for the year, 8.

Valuation of plant, per capita of capacity, $992; real estate, $835; personal, $157.

Daily average number of patients, 974; increase for the year, 32.

Number Oct. 1, 1915, 1,015.

Insane commitments, 55; increase for the year, 23.

Sane epileptics admitted, 136; decrease for the year, 24.

First cases of epilepsy, 159, being 83.24 per cent. of all epileptics received.

The general statistics for the year are: —

	Insane.			Sane.			Totals.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients in the hospital Oct. 1, 1914,	169	170	339	316	308	624	485	478	963
Admitted within the year,	66	54	120	107	97	204	173	151	324
Viz.: by commitment,	28	27	55	9	5	14	37	32	69
voluntary,	–	–	–	63	59	122	63	59	122
by transfer,	32	26	58	–	–	–	32	26	58
from visit,	3	–	3	10	10	20	13	10	23
from escape,	–	–	–	1	–	1	1	–	1
from escape, nominally admitted to discharge,	–	–	–	3	–	3	3	–	3
from visit, nominally admitted to discharge,	3	1	4	21	23	44	24	24	48
Whole number of cases within the year,	235	224	459	423	405	828	658	629	1,287
Dismissed during the year,	27	66	93	106	73	179	133	139	272
Viz.: discharged,	6	3	9	43	33	76	49	36	85
as recovered,	–	–	–	–	1	1	–	1	1
as capable of self-support,	–	–	–	–	–	–	–	–	–
as improved,	2	1	3	27	14	41	29	15	44
as not improved,	4	2	6	16	18	34	20	20	40
died,	14	15	29	26	14	40	40	29	69
transferred,	–	47	47	–	–	–	–	47	47
on escape Oct. 1, 1915,	–	–	–	2	1	3	2	1	3
on visit Oct. 1, 1915,	7	1	8	35	25	60	42	26	68
Patients remaining Sept. 30, 1915,	208	158	366	317	332	649	525	490	1,015
Viz.: State patients,	195	147	342	305	301	606	500	448	948
private patients,	3	5	8	8	16	24	11	21	32
reimbursing patients,	10	6	16	4	15	19	14	21	35
Number of different persons within the year,	231	222	453	399	382	781	629	604	1,233[1]
Number of different persons admitted,	63	53	116	83	74	157	145	127	272[1]
Number of different persons admitted voluntarily and by commitment,	28	27	55	72	64	136	99	91	190[1]
Number of different persons dismissed,	24	64	88	82	50	132	106	114	220[2]
Number of different persons dismissed to community,	24	18	42	82	50	132	106	68	174
Number of different persons discharged capable of self-support,	–	–	–	–	–	–	–	–	–
Daily average number of patients,	175.94	165.74	341.68	311.64	320.68	632.32	487.58	486.42	974
Viz.: State patients,	165.79	157.21	323.00	300.23	290.28	590.51	466.02	447.49	913.51
private patients,	2.78	3.53	6.31	8.08	14.84	22.92	10.86	18.37	29.23
reimbursing patients,	7.37	5.00	12.37	3.33	15.56	18.89	10.70	20.56	31.26

Whole number of temporary-care cases, 1 male.

[1] One male discharged as insane and readmitted as insane; 1 female discharged as insane and readmitted as insane; one male discharged as sane and readmitted as insane.

[2] One female discharged as insane, readmitted as insane and transferred.

First Cases of Epilepsy.

Native-born patients, 79.87 per cent.; mothers, 35.84 per cent.; fathers, 40.25 per cent.

Mean age at onset of epilepsy, 13.54 years; when admitted, 25.97 years..

Resident in cities or large towns, 74.21 per cent.; country districts, 25.79 per cent.

Death of Epileptics.

Whole number, 69; 5.59 per cent. of whole number of persons treated.

Tuberculosis was present in 10.14 per cent.; epilepsy was the immediate cause of death in 49.27 per cent. Mean age at first attack of epilepsy, 21.98 years; at death, 38.56 years.

Finances.

Expenditures from maintenance funds, $249,825; total receipts, $14,922; being $8,605 from private patients, $4,527 from reimbursing patients, $1,790 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.85; the same less repairs and improvements, $4.64.

Weekly per capita cost of whole service, $2.11; ward service, $0.94.

One person employed for every 4.04 patients; 1 nurse for every 9.65 patients.

Average monthly wage for all persons employed, $43.49; for nurses, $39.53; men, $43.27; women, $30.19.

Extract from Superintendent's Annual Report.

An out-patient department has been opened in connection with the regular work of the hospital. A representative of the medical staff is at the Academy of Medicine in Springfield from 2 to 4 o'clock on the first and third Wednesdays of each month; at Greenfield Hospital on the second Monday of each month at 2 o'clock; and in Pittsfield at the House of Mercy on the last Thursday of each month at 2 o'clock. There is also an opportunity to bring patients for consultation to the hospital on Tuesday afternoon every week in the year. Our purpose in examining patients is to advise about their care at home, to recommend such measures as

would allow them to remain under the care of the family physician at home, and also to consider the advisability of their having hospital treatment for a limited time so that they may become accustomed to the proper diet for an epileptic, and may acquire experience which will be useful to them in their home life. Former patients who desire consultation are welcomed at any of these consultations.

The work of the Cattle Bureau has been of advantage to us. The veterinary field agent of the United States Department of Agriculture has arranged for a lecture and demonstration of the serum treatment for the prevention of cholera in pigs. The State Cattle Bureau has followed up its usual work in reference to the inoculation of the pigs throughout the year. They have also aided us in making tuberculin tests on our cows, and we have a fair start made with thoroughbred cows, tuberculin tested, placed in a new and clean barn.

We have recently made arrangements whereby our nurses are to receive at the end of their three years' training in this hospital six months' training in the Wing Memorial Hospital in Palmer, which includes work in obstetrical, surgical and medical nursing of a general hospital. Before a nurse can take this course she must have satisfactorily completed the three years' course prescribed in this hospital.

Foxborough State Hospital.

Opened in February, 1893. Present capacity, 299.

Valuation of the plant, per capita of capacity, $1,144; real estate, $966; personal, $178.

Daily average number of patients under care, 296; in hospital, 295; in family care, 1; increase for the year, 5.

Number Oct. 1, 1915, 329; in hospital, 328; in family care, 1.

All commitments, 48.

Commitments as insane, 46.

First cases of insanity, 32; 69.57 per cent.

Voluntary admissions, none.

Commitments as inebriate, 1.

Temporary-care admissions, 3.

First Cases of Insanity.

Native-born patients, 40.63 per cent.; mothers, 14.29 per cent.; fathers, 14.29 per cent.

Age sixty years or over, 6.25 per cent.

Residents in cities or large towns, 96.88 per cent.; country districts, 3.12 per cent.

Previous duration of insanity under six months, 31.25 per cent.

Curable forms of insanity, 12.50 per cent.

Causes: hereditary, 56.25 per cent.; alcoholic, 31.25 per cent.; senility, 6.25 per cent.; syphilis, 2.38 per cent.

Deaths of the Insane.

Whole number, 27; 6.52 per cent. of whole number of persons treated.

Curable forms of mental disease present in 18.52 per cent.; senile insanity in 22.22 per cent.; general paralysis in 7.41 per cent.; coarse brain lesions in 11.11 per cent.

Finances.

Expenditures from maintenance funds, $108,759; total receipts, $2,543; being $22 from private patients, $2,039 from reimbursing patients, $482 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $6.69; the same less repairs and improvements, $6.37.

Weekly per capita cost of whole service, $3.02; ward service, $0.77.

One person employed for every 3.14 patients; 1 nurse for every 8.27 patients.

Average monthly wage for all persons employed, $41.18; for nurses, $27.70; men, $29.81; women, $25.77.

MASSACHUSETTS SCHOOL FOR THE FEEBLE-MINDED AT WALTHAM.

Opened in October, 1848. Present capacity, 1,483; at Waltham, 1,183; at Templeton, 300.

Valuation of plant, per capita of capacity, $719; real estate, $612; personal, $107.

Daily average number of patients, 1,605; increase for the year, 57.

Number Oct. 1, 1915, 1,635.

The general statistics for the year are: —

	Males.	Females.	Totals.
Number present Sept. 30, 1914,	954	611	1,565
Admitted during the year,	289	95	384
School cases,	66	24	90
Custodial cases,	97	44	141
By transfer,	–	2	2
From visit,	56	13	69
From escape,	4	–	4
Nominal admissions from visit,	50	12	62
Nominal admissions from escape,	16	–	16
Whole number of cases within the year,	1,243	706	1,949
Dismissed within the year,	229	85	314
Discharged,	98	40	138
Capable of self-support,	11	1	12
Improved,	70	25	95
Not improved,	17	14	31
Died,	19	18	37
Transferred,	4	4	8
On visit Sept. 30, 1915,	87	23	110
On escape Sept. 30, 1915,	21	–	21
Number present Sept. 30, 1915,	1,014	621	1,635
State patients,	984	607	1,591
Private patients,	18	12	30
New England beneficiaries,	12	2	14
Daily average number of patients for the year,	995	610	1,605
Number at school Sept. 30, 1915,	720	621	1,341
Number at Templeton Sept. 30, 1915,	294	–	294
Applications during the year,	–	–	392

Finances.

Expenditures from maintenance funds, $309,883; total receipts, $14,759; being $11,093 from private sources, $1,914 from reimbursing patients, and $1,752 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $3.68; the same less repairs and improvements, $3.54.

Weekly per capita cost of whole service, $1.55; ward service, $0.71.

One person employed for every 5.55 patients; 1 nurse for every 8.76 patients.

Average monthly wage for all persons employed, $37.36; for nurses, $27.18; men, $34.80; women, $26.48.

Extract from Trustees' Annual Report.

The past year has been no exception to recent years at the school in the matter of routine work and the satisfactory care of the inmates, but the possibilities of development of our work have grown more and more manifest.

The attention given to patients after leaving the school, either on vacation or by discharge, has been improved upon. The testing of the mentality of our inmates has occupied the close attention of two or three experts throughout the year, on a line inaugurated the year before, and is now being extended into an investigation of the sources whence these inmates come.

The investigator looks into the surroundings in which they lived, obtains histories of their families, and, in short, seeks all information which will throw light upon the cases.

By our experts valuable work is being done in examination of brains as to the pathology of mental defect. For this work we need a laboratory. We need funds for the prosecution of this work in connection with some such institution as the Harvard Medical School. We should have to work with such a school at first, and later have facilities for our own permanent work.

Our labors at Waverley have gone beyond the stage of the mere caring for those who are committed to our charge, and have become broader and larger, in that from our experience and insight we can serve the world by helping it to prevent the existence of this pitiable class of unfortunates. Is there any greater work, any more inspiring possibilities, than loom up before us as the ultimate result of these labors in the line of research work and practical help and advice?

To feeble-minded parents feeble-minded children are born. To stop the number of the feeble-minded the marriage of feeble-minded persons, from whom certainly follows the birth of feeble-minded children, must be stopped.

The importance and far-reaching effect of this knowledge can hardly be overestimated. Through our investigations, and those of others along like lines, this information is gradually spreading, but it is not spreading fast enough to check as yet the increase in number of these defective persons.

One of the disadvantages under which we labor in these attempts at help and advice is the law, or rather lack of a law, affecting the marriage relation of the feeble-minded.

Among the marriages prohibited by the laws of the Commonwealth we find in section 5 of chapter 151 of the Revised Laws the following: "An insane person, or an idiot, shall not be capable of contracting marriage."

The statutes are silent with reference to the feeble-minded, where the likelihood of marriage is so great and the temptation so insidious. Formerly, even as late as the establishment of this school in 1850, the distinction between "idiotic" and "feeble-minded" was not clearly marked. Now it is recognized that the word "idiot" hardly covers "feeble-minded." With our present knowledge of the dangers to the public in the marriage of the feeble-minded, it seems clear that the law should be amended to include the feeble-minded, in fact, all the mentally defective, in the classes prohibited from marriage.

The dissemination of information upon this subject, the bringing it forcibly to bear upon the people in our cities and towns, is absolutely essential to accomplish a lessening of the number of these unfortunates. For two years, especially during the current year, from our experience we have been able to impart information to bodies of our citizens to a more or less limited degree. That work should be continued and extended, until the whole State shall be filled with a realizing sense of responsibility, and there is a widespread demand for such a change in our laws as we recommend.

How is this to be done? First, we need funds for more thorough and careful research and investigation, and for the preparation of data from which a convincing presentation of the facts can be made.

Then, through the agency of State officials or of bodies of citizens, the information that has been acquired should be brought to the notice of every citizen. By circulars, through the public press, and by free lectures this knowledge should be widely spread.

Legislation may have some effect, but education will have a greater and more lasting effect.

The far-reaching and beneficent results of such a movement cannot be overestimated. Shall we ask the Legislature to take active steps, by way of appropriations for the conduct of this plan of education, to enable it to show results? The results in the long run will be such that the burden of taxation for the support of great numbers of imbeciles will be reduced, and the money expended will bring return in lessened taxes, and in smaller numbers of the feeble-minded who often become so-called criminals.

The possibilities of this research work grow upon us as we consider it and as progress is made in it.

There is a wonderful opportunity for use of private resources. Appropriations for such purposes the Legislature, besieged by countless annual demands, is loath to provide; but from such appropriations, as we have just said, the social and economic saving to the Commonwealth would be enormous, and the results, as we have shown, far-reaching.

Extract from the Superintendent's Annual Report.

Work at Templeton.

The 300 boys at the Farm Colony at Templeton have had a busy year. They have cleared over 10 acres of rough land, ready for plowing; 20,000 pine seedlings have been set out; 848 square yards of concrete sidewalk have been laid; 600 cubic feet of concrete partitions and walls have been built in basements; 1,300 square yards of cement floors have been laid in the basements of the farmhouses. The dormitory for 15 patients, authorized by the Legislature, built of poured cement with hollow tile inside, is nearly completed. This building is fireproof with slate roof, and when completed, with furnishings, will cost $3,500, plus the labor of the boys and of the men who had charge of them. This low per capita cost for a building of this type is due to the fact that the greater part of the work was performed by the boys themselves under skilled supervision. The new barn at Narragansett Colony, 40 by 80 feet, is roofed in. The walls of this barn are poured cement with hollow tile lining, and it is practically fireproof. This barn, with hay shed and silo, will cost $3,500 when completed, plus the labor of the boys and of the attendants who directed their work. The year at the colony has been as successful as usual, and we have an abundant supply of fruit and vegetables for the winter.

Visitors.

The number of visitors at the school seems to be increasing each year. The friends of the children visit them very frequently, and some days there are from 60 to 100 patients' visitors. Our facilities for handling these visitors are very limited. We practically have no reception rooms now, as the rooms formerly devoted to that purpose are used for office purposes. There is great need of the building for which we have asked for several years past, — the so-called recreation building, to be used for the accommodation of the employees and for the children's visitors.

Many visitors come to the school to study the children, and to observe the methods of instruction and care. These visitors include trustees of other institutions, State boards, public school superintendents and principals, teachers, social workers and physicians. It is rare to have a day without two or three or more interested visitors of this type. A large number of teachers come here during the year to make detailed studies of the exact methods applicable to the training of the feeble-minded. Large numbers of classes of students come to the school from the normal schools, colleges and professional schools of the State. During the past school year 32 clinics for classes of this sort were held at the school.

Out-patient Work.

The out-patient work of the school has greatly increased. This work means that the experienced officers of the school, already in the service of the State, are being utilized for the problems of citizens throughout the State.

An out-patient clinic is held at the school at Waverley every Thursday. Monthly clinics are held in connection with the school authorities in Fall River, Worcester and Haverhill. We have promised to open monthly clinics at Framingham, Waltham city and New Bedford. We have several requests from other cities and towns for such clinics. These clinics serve for the examination of patients from the surrounding territories. Children are brought to the clinics for expert examination and advice, and the advice given enables many patients to be comfortably kept at home for one or two or more years, or perhaps permanently, who otherwise would have to be cared for at State expense in institutions. It costs the State practically $1,000 per patient for building institution buildings, and the annual cost for maintenance is about $200 per patient.

The school is often applied to for advice as to the survey of a school population in various towns and cities, with reference to the recognition of mental defect, and to the methods to be employed in the establishment of special public school classes for defective children.

During the year the out-patient clinics dealt with 743 individual patients; 399 new patients were given a thorough mental examination. Advice was given concerning the other patients to parents or friends who came to the clinics for that purpose, or advice was given by letter or telephone.

The increase in the out-patient work has been accomplished without additions to our regular staff. Indeed, we have been one physician short nearly all the year. This additional work has been cheerfully performed by the staff, but they have been overworked, and another physician should be added.

This work of the out-patient clinics is very closely allied to the general educational work in regard to mental defect in which we are called upon to assist. There were 32 clinics at the school during the year. The superintendent delivered 59 lectures on mental defect and its causes, prevention and management, before various organizations in cities and towns throughout the State. There is very great demand for the literature relating to mental defect published and furnished by the school. There is especial demand for literature which will enable the parents to give their defective children suitable care at home, and for literature relating to the methods of mental testing and diagnosis of mental defect.

The demand for out-patient work and the opportunities it presents strongly emphasize the fact that the problem of feeble-mindedness is not altogether an institution problem, but a question touching the individual, the home, the school, the courts, the prisons and the community generally.

There is an increasing demand among thinking people that our present

knowledge of the highly hereditary nature of certain types of feeble-mindedness shall be so applied that these people shall not be allowed to become the parents of other feeble-minded people. Many feeble-minded persons for their own good and that of the community need institution care and protection. Many other feeble-minded persons can live happily at home when they are properly cared for by their friends, especially when in their youth they have been trained in the special classes of the public schools or in the institutions. The great difficulty is to differentiate those who must be restrained from those who can be trusted with their liberty. This difficulty is being approached by the out-patient clinics of this and other institutions, by the public school classes, the field workers, child-helping societies, and other agencies for after-care and supervision. The State is gradually being covered with a network of well-informed organizations which will eventually have cognizance of practically every feeble-minded person in the State. This knowledge will eventually insure the safe custody of those who need custody, and make possible home care for those who can properly use their liberty.

Wrentham State School.

Opened in June, 1907. Present capacity, 1,005; increase for the year, 400.

Valuation of plant, per capita of capacity, $916; real estate, $831; personal, $85.

The general statistics for the year are: —

	Males.	Females.	Totals.
Number remaining Sept. 30, 1914,	273	356	629
Admitted within the year,	60	68	128
By commitment,	36	55	91
By transfer,	5	4	9
Returned from visit,	8	3	11
Returned from escape,	–	–	–
Nominally from visit,	9	6	15
Nominally from escape,	2	–	2
Whole number of cases within the year,	333	424	757
Dismissed within the year,	55	28	83
Viz.: Discharged,	29	10	39
Transferred,	–	2	2
Died,	8	3	11
On visit Sept. 30, 1915,	12	12	24
On escape Sept. 30, 1915,	6	1	7
Remaining Sept. 30, 1915,	278	396	674
Daily average number,	271	370.512	641.512

Finances.

Expenditures from maintenance funds, $144,807; total receipts, $2,520; being $361 from private sources, $1,081 from reimbursing patients, $1,078 from other sources.

Weekly per capita cost of maintenance computed on net expenses, $4.20; the same less repairs and improvements, $4.01.

Weekly per capita cost of whole service, $1.62; ward service, $0.68.

One person employed for every 5.92 patients; 1 nurse for every 9.79 patients.

Average monthly wage for all persons employed, $41.55; for nurses, $28.89; men, $47.78; women, $27.60.

Extract from Trustees' Annual Report.

The extent to which Wrentham is a school in the strict sense of that word is probably as little realized by the general public as any feature of its work. How far it is from a custodial institution, how far from an asylum for defectives, is only to be realized by those who visit the institution and observe the regular school work. The schoolrooms conform to the requirements of the graded schools of the progressive city or town. Out of the present population there are less than 100 who do not come into the school courses to a greater or less extent. The exceptions are some 50 girls who are not in the classes because they are not responsive to instruction, and the 25 or slightly more low-grade cases toward whom there is no possible duty except physical care. In the schools there is instruction in such branches as reading, writing, geography and history. While the highest progress is very nearly limited to what corresponds to the sixth grade of the public schools, the proficiency shown in one or another branch by many of the children is gratifying, and the general appearance of the school goes far to relieve the common estimate of the condition of the feeble-minded, which is never one of even mental idleness if there is any degree, however slight, of mental capacity.

While mention of the school work, in its ordinary educational features, is warranted by the fact that it has come to an advanced point during the year, we do not intend to give the impression that it is in any degree a separate or special function. It is the complement of the training which has all along had the first place in the institution's effort. It consummates the policy which takes each child in hand at the outset, with a purpose to overcome as far as possible the handicap of mental defect, to develop the greatest attainable keenness and activity of the senses, and to bring about the nearest approach to normality within the capacity of each

individual. Sense-training as the primary effort is carried to the utmost point, and the visitor not familiar with its devices and results finds an astonishing proficiency in many of the children, seeming almost a denial of their feeble-mindedness. Again, there is the occupational activity, perhaps the most conspicuous feature in the scheme of individual culture, where such faculties as the child possesses are directed to the most promising channel. The sum of it all is a busy community, a happy colony, in which it is the evident intent to have each of the State's charges come to the place where he may do the most and have the most done for him. It is that it fits into and rounds out such a little city that we take pride in the schoolhouse, so nearly like the school of the outside world.

As of great practical value, the addition of a social worker to the staff is being justified. It opens the possibility of a new way of serving the school's ends. The trustees are called upon monthly to consider a large number of applications for discharge of inmates or for their release for a period. Their settled policy is to give to each the most careful examination. Is the boy or girl wisely kept in the school? Is there reasonable prospect that he or she would be properly cared for if returned to such home as is offered? Is it for the public interest to retain the child within the school, or to have whatever expense his retention involves lifted? Particularly as to those of child-bearing age, what is the security that the common fate of the weak-minded girl or woman will be so guarded as to make certain that she will not be abused, because an easy source of viciousness, and produce her kind to the future burden of the State? These are some of the elements in the problem of release or discharge. And it is obvious how much an inquiry into home conditions, possible associations, and the intent of the people who make the request can bring to the administration dealing with the question.

Again, the social worker most valuably extends the out-care of the released persons by in some measure supervising them, and when the question of return after vacation or of continued absence arises she presents the results of an inquiry that could not otherwise be reached. The employment of a single social worker cannot go far in the way of making possible more numerous releases, but our experience in the first year of this addition to the service suggests a possible future for supervision of cases outside the institution, relieving the Commonwealth of the support in institutions of an unknown number of its charges.

We would suggest a modification of the requirement that at the end of six months' absence on leave the person must return to the school, thus leaving the permit of absence indeterminate or open to extension by the trustees. There is no apparent virtue in coming back to the school for a day or an hour, either for the institution or the patient, and there are actual disadvantages to both parties aside from imposing expense upon people who are generally little able to bear it.

With its growth and the corresponding enlargement of its corps of employees the Wrentham school comes to realize more keenly the diffi-

culty of securing fit employees. There is warrantable pride in the staff that has been gradually built up at the school. In the earlier days, with the relatively few persons required, there was opportunity for deliberate selection, but when a year adds a third to the number of inmates and brings it near to a thousand, the numerous additions to the force are less easy of selection. They are drawn from varied walks of life with the one fact in common, — that they have had no definite preparation in the kind of work they are here to do. With all the care a superintendent can employ, and we feel sure none is more searching than the superintendent at Wrentham, the choice is somewhat of a lottery, and the only test is in the way they later respond. Thus the service is constantly in a state of individual experiment and is, as well, in large part a training school. One must look with somewhat of wonder that as efficient a corps can be worked out as that which has been built up here. The situation presents its own powerful argument for some policy on the part of the State for training of institutional workers.

The trustees must here acknowledge the entirely happy relations with the State Board of Insanity. The considerable change in the division of responsibilities that the act of 1914, establishing the present Board, brought about has been hardly at all evident in our actual experience. The rule of entire and public-spirited co-operation appears to be much more significant than any form of organization.

Extract from Superintendent's Annual Report.

A great influx of untrained girls and boys unavoidably has a very disquieting and upsetting influence on the established inmates. It is a pleasure, however, to report that up to the present time all the departments are meeting this increased task with courage and efficiency.

The general health of our inmate population has been good throughout the year. There have been no epidemics during the winter, with the exception of one of grippe, some of the cases being complicated with pneumonia.

All departments of the institution have given splendid service. The evening classes have been continued through the year, thus bringing the adult population into close touch with the schools. By this means the influence of the schools has been felt throughout the institution. The adult population has shown itself very much interested in evening classes, especially in the industrial courses.

The principle of putting acquired knowledge into practice has had free range throughout the year. The girls trained in the domestic science courses have added much to the efficiency of the culinary department. The girls have greatly assisted in the preparation and cooking of foods as well as in the serving of foods in the different buildings. Again, in the laundry and sewing rooms the girls have had free opportunity to make application of their training to the performance of useful duties. The

boys have had an opportunity to freely express themselves in the industrial and occupational departments as well as in the farm department.

In developing and organizing the institution, the aim of the management has been to complete certain of its units and parts so as to have its main positions in good working order while the rest is undergoing construction. This method has been well adhered to, resulting in the completion, first, of the central portion and south side or front of the institution. During the year just completed efforts have been directed mainly towards the development of the north side. Here, during the year, three dormitories have been completed and furnished, with a bed capacity of 350. Three employees' homes have also been erected. The sewers, water pipes and steam pipes have been laid, roads and walks have been built and some of the grading has been done.

The capacity of the farm group has been doubled and now accommodates 100 boys. The addition to the boys' dining room at the farmhouse has been completed, together with the installation of a complete modern cooking apparatus in the kitchen. Steam pipes have been laid to connect the farm buildings with the central heating plant. The boys who have been occupying two of the girls' buildings on the south side have been moved to the boys' buildings on the north side, and these two buildings are now undergoing thorough repairs, painting and proper renovating, to make them ready for the reception of girls.

During the year the bed capacity of the institution has been raised from 610 to 1,010. The hospital, now under construction, will be completed by midwinter or early spring, and will add another 75 beds to the capacity, thus bringing the school's accommodations to nearly 1,100.

THE PRIVATE INSTITUTIONS.

The McLean Hospital.

Opened in October, 1818. Present capacity, 220.
Valuation of plant, per capita of capacity, $8,807.
Average weekly per capita cost of maintenance, $29.54.
Daily average number of patients, 209.
Number Oct. 1, 1915, 211.
All commitments, 111; decrease for the year, 2.
Commitments as insane, 107.
First cases of insanity, 60; 56.07 per cent.
Voluntary admissions, 51; decrease for the year, 9.
Temporary-care admissions, 19.
Admissions as inebriates, 2.

First Cases of Insanity.

Native-born patients, 85 per cent.; mothers, 69.49 per cent.; fathers, 63.33 per cent.

Age sixty years or over, 20 per cent.

Residents in cities or large towns, 88.33 per cent.; country districts, 11.67 per cent.

Previous duration of insanity under six months, 61.67 per cent.

Curable forms of insanity, 53.33 per cent.

Causes: hereditary, 30 per cent.; alcoholic, 7.14 per cent.; coarse brain lesions, 16.67 per cent.; syphilis, 11.67 per cent.

Recoveries of the Insane.

Whole number, 30; 28.04 per cent. of commitments.

Recoveries of first cases of insanity, 12; 20 per cent. of first cases.

Recoveries in curable group A, 10; 31.25 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 15; 4.66 per cent. of the whole number of persons treated.

Curable forms of mental disease present in 33.33 per cent.; general paralysis in 40 per cent.; coarse brain lesions in 6.67 per cent.

Extract from Superintendent's Annual Report.

Among the various forms of treatment hydrotherapy still holds an important place. The different procedures with the use of apparatus in the bathrooms of the women's gymnasium are employed for a tonic effect, and appear to cause reactions similar to those of vigorous exercise without muscular effort on the part of the patient. On the other hand, the continued warm bath is given, in especially prepared rooms adjoining the bedrooms of the patients, for its soothing influence. It certainly is quieting in some instances, lessening noise and violence. It also tends to promote the appetite, increase sleep, and it insures cleanliness. The only dangers from these baths as they are given here are a possible collapse in cases of arteriosclerosis and valve diseases of the heart, and a tendency to the lighting up of an old inflammation of the middle ear. Patients

are never fastened in the tubs, so that the danger of collapse is minimized by the ability of the patient to get out at will, as is also any possible danger from a sudden rise in temperature of the water. It is interesting to note that this latter danger is now being more universally recognized, and a prediction is made that in time no hospital will restrain its patients in these continued warm baths. . . .

In the psychological laboratory the original apparatus completed last year has been in very satisfactory use, though improvements are being introduced in the construction of further models desired by another institution. The electrically driven multiple pen recorder and the variable selective chronograph, being built especially for the laboratory, were economically purchased in a nearly completed state with much other accessory apparatus. The experimental problems have been those of choice reactions according to the lines indicated in the last report. The aim is for measures of mental stability that shall be independent of "intelligence." Thus far the results are favorable, but the number of cases is not yet large enough for generalization.

While more laboratory work was done this year than during any year since the laboratory has been under the present direction, the widening field of psychopathology makes it increasingly difficult to give sufficient time to the laboratory problems, especially in view of its important developments outside the laboratory. The facilities of the hospital laboratory are now far from completely utilized, and the department could not fully utilize them without neglecting every other aspect of its work. Some technical assistance was obtained during the past year, and upon the continuance of this depends the most efficient conduct of the laboratory work of the department. . . .

Work in the handicraft rooms has been pursued throughout the year, with some lessening of activity during the summer months, when the out-of-door life presents so many healthful attractions. With the women, of the twenty-three principal occupations offered, the most frequently chosen have been weaving, clay work and knitting for the soldiers. The men have done many things, and it is interesting to note that a number have preferred such useful work as reseating chairs to the more artistic forms of employment. Two doll houses of elaborate construction were made during the year by one of the men and were then taken to the women's rooms for furnishing. They aroused great interest, and twenty-four patients were employed in the making and furnishing of the second house. The first was presented to the Children's Hospital in Boston, the second to the New England Peabody Home for Crippled Children in Hyde Park.

Other Private Licensed Institutions.

Number, 22. Dr. George B. Coon of East Walpole and Dr. H. N. Archibald of Cheshire relinquished their licenses during the year. The licenses of Dr. John Merrick Bemis of

Worcester and Dr. Henry C. Baldwin of Wareham were relinquished through death. Dr. Arthur C. Doten of Worcester was granted a license to care for persons addicted to the intemperate use of narcotics and stimulants.

On Sept. 30, 1915, there were in these institutions 220 patients, an increase of 9 for the year. The insane numbered 140, or 63.63 per cent. There were 187 admissions of the insane and 182 dismissals during the year.

Twenty-six visits were made to these institutions by a physician representing the Board.

The numbers on Sept. 30, 1915, for each institution are set forth in the following tabulation: —

INSTITUTIONS.	Number of Patients Sept. 30, 1915.																				
	INSANE.			SANE, VOLUNTARY.			INEBRIATE.			FEEBLE-MINDED.			TEMPORARY CARE.			NON-MENTAL.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Bournewood, Henry R. Stedman, M.D.,	5	7	12	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	5	8	13
Channing Sanitarium, Walter Channing, M.D.,	–	11	11	1	5	6	–	–	–	–	–	–	–	–	–	–	3	3	1	19	20
Pine Terrace, W. F. Robie, M.D.,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2	2	–	2
Herbert Hall Hospital, Walter C. Haviland, M.D.,	5	9	14	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	5	11	16
Newton Sanatorium, N. Emmons Paine, M.D.,	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Locust Grove Sanitarium, Miss Alice R. Cooke,	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Framingham Nervine, Ellen L. Keith, M.D.,	–	2	2	–	2	2	–	–	–	–	–	–	–	–	–	–	11	11	–	15	15
Wellesley Nervine, Edward H. Wiswall, M.D.,	2	19	21	–	–	–	–	–	–	–	–	–	–	–	–	2	5	7	4	24	28
Sherwood, J. F. Edgerly, M.D.,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	1	–	1
Private Hospital, George B. Coon, M.D.,	7	5	12	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	8	6	14
Highland Hall, Samuel L. Eaton, M.D.,	1	1	2	–	2	2	–	–	–	–	–	–	–	–	–	–	5	5	1	8	9
Dr. Reeves' Nervine, Harriet E. Reeves, M.D.,	–	6	6	–	–	–	–	–	–	–	–	–	–	–	–	2	3	5	2	9	11
Wheeler Sanitarium, Mrs. Maria H. Paul,	–	4	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	4
Arlington Health Resort, Arthur H. Ring, M.D.,	4	28	32	–	–	–	1	–	1	–	1	1	–	–	–	4	5	9	9	34	43
Private Hospital, Edward B. Lane, M.D.,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Private Hospital for Mental Diseases, Edward Mellus, M.D.,	2	11	13	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	12	14
Glenside, Mabel D. Ordway, M.D.,	–	5	5	–	1	1	–	–	–	–	–	–	–	–	–	–	7	7	–	13	13
Fisk Hospital, Richard C. Cabot, M.D.,	–	–	–	–	–	–	3	–	3	–	–	–	–	–	–	–	–	–	3	–	3
Knollwood, Earle E. Bessey, M.D.,	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	1	3	4
Private Hospital, Sara E. Stevens, M.D.,	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	2	2	–	3	3
Bellevue Sanitarium, Mary W. L. Johnson, M.D.,	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Private Hospital, A. C. Doten, M.D.,	–	–	–	–	–	–	2	1	3	–	–	–	–	–	–	–	–	–	2	1	3
Totals,	27	113	140	1	14	15	6	1	7	–	1	1	–	–	–	13	44	57	47	173	220

UNLICENSED HOMES.

The Board continues its supervision of unlicensed homes where the insane, feeble-minded, epileptic and persons addicted to the intemperate use of narcotics or stimulants are likely to be found. In each case the requirements of the law are explained, and a copy left with the manager.

FAMILY CARE OF THE INSANE.

Under State Board.

First patient boarded in a family, Aug. 10, 1885. Since placed, 1,272 different patients.

Number in families Oct. 1, 1915, 86, — 1 man, 85 women.

Placed during the year, 5 persons, a decrease of 31.

Daily average number for the year, 146, a decrease of 173.[1]

Passed out of public support: —

During the year, 6, a decrease of 2; viz.: discharged self-supporting, 1; discharged to friends, 2; self-supporting in families, 3.

Since 1885, 267 different patients, viz.: discharged self-supporting, 94; discharged to care of friends, 41; self-supporting in families, 81; boarded with friends without public expense, 31; became private patients, 20.

Reappeared under public support: —

During the year, 5; since 1885, 91; 34 per cent.

Number of families having patients, 38, a decrease of 63; 17 families having 1 patient; 6 families, 2; 6 families, 3; 6 families, 4; 3 families, 5.

Number of cities and towns in which patients are boarded, 6, a decrease of 44. Largest number of patients in any one town, 58; of families, 25.

The general statistics for the year are: —

[1] This does not mean an actual decrease in the family-care system, the Board having requested each institution to care for the family-care patients in its district. On Jan. 1, 1915, the Board transferred 178 patients from family care under the State Board to family care under trustees of institutions. (See page 154.)

	1915.			Increase for the Year.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Remaining Sept. 30, 1914,	12	290	302	–	34[1]	34[1]
Admitted within the year,	1	7	8	2[1]	30[1]	32[1]
By transfer from institutions,	–	5	5	2[1]	30[1]	32[1]
Nominally admitted from visit, for discharge,	1	2	3	–	–	–
Whole number of cases within the year,	13	297	310	2[1]	64[1]	66[1]
Dismissed within the year,	12	212	224	9	141	150
Vis.: Discharged,	2	12	14	1	8	9
Capable of self-support,	2	8	10	1	5	6
Requiring further care,	–	4	4	–	3	3
Transferred to institutions,	2	29	31	2	33[1]	31[1]
Unsuitable,	1	11	12	1	14[1]	13[1]
Temporarily,	1	9	10	1	17[1]	16[1]
Ill,	–	9	9	–	2[1]	2[1]
Transferred to family care by trustees,	8	170	178	8	170	178
Died,	–	1	1	–	1[1]	1[1]
Escaped,	–	–	–	1[1]	1[1]	2[1]
On visit Sept. 30, 1915,	–	–	–	1[1]	2[1]	3[1]
Remaining Sept. 30, 1915,	1	85	86	11[1]	205[1]	216[1]
Vis.: Supported by State,	1	75	76	5[1]	171[1]	176[1]
Reimbursing,	–	5	5	–	12[1]	12[1]
Private,	–	3	3	1[1]	5[1]	6[1]
Self-supporting,	–	2	2	4[1]	10[1]	14[1]
Living with friends without public aid,	–	–	–	1[1]	7[1]	8[1]
Number of different persons within the year,	12	294	306	2[1]	62[1]	64[1]
Number of different persons admitted,	–	5	5	2[1]	29[1]	31[1]
Number of different persons dismissed,	11	210	221	9	145	154
Daily average number,	4.12	141.71	145.83	8.19[1]	164.55[1]	172.74[1]
State,	2.42	120.95	123.37	4.01[1]	134 42[1]	138.43[1]
Reimbursing,	–	8.11	8.11	–	9.74[1]	9.74[1]
Private,	.25	4.47	4.72	.75[1]	4.03[1]	4.78[1]
Self-supporting,	1.20	6.27	7.47	2.68[1]	10.18[1]	12.86[1]
Living with friends without public aid,	.25	1.91	2.16	.75[1]	6.18[1]	6.93[1]

[1] Decrease.

The total and weekly per capita expenditures of the State on account of patients in private families for the year ending Nov. 30, 1915, and since Oct. 1, 1889, are shown, as follows: —

	Fiscal Year ending Nov. 30, 1915.	Since Oct. 1, 1889.
Payments for board,	$16,813 42	$665,925 34
Average number of patients, exclusive of private patients,	110.05	199.28
Weekly per capita cost of board,	$2 94	$2 43
Payments for extra clothing not included in board rate,	$44 28	$2,535 53
Payments for medical attendance, etc., not included in board rate,	$92 81	$4,671 30
Weekly per capita cost of such expenses, outside of board rate,	$0 02	$0 03
Weekly per capita cost of support (being cost of board, clothing, medical attendance, etc.).	$2 96	$2 47
Payments for supervision (being transportation, salaries and expenses of visitors).	$1,635 27	$84,974 77
Average number of patients,	113.77	206.20
Weekly per capita cost of supervision,	$0 28	$0 29
Weekly per capita cost of support and supervision,	$3 24	$2 76

Under Trustees.

The trustees of institutions were authorized, by chapter 458 of the Acts of 1905, to place their patients in the care of private families under substantially the same conditions as the State Board.

First patient boarded June 13, 1905. Since placed, 381 different patients.

On Jan. 1, 1915, the State Board transferred 178 patients from family care under the Board to family care under trustees of institutions, in accordance with the policy of the Board that each institution care for the family-care patients in its district.

Number in families Oct. 1, 1915, 317, — 25 men and 292 women.

Placed during the year, 297 persons, an increase of 270.

Daily average number for the year, 226.

Number of families having patients, 154, an increase of 126; 87 families having 1 patient each; 20 families, 2; 16 families, 3; 17 families, 4; 10 families, 5; 4 families, 6.

Number of towns in which patients are boarded, 73, an increase of 45. Largest number of patients in any one town, 58; of families, 18.

The general statistics for the year are: —

	Worcester Hospital.	Taunton Hospital.	North-ampton Hospital.	Danvers Hospital.	West-borough Hospital.	Boston Hospital.	Grafton Hospital.	Medfield Hospital.	Gardner Colony.	Fox-borough Hospital.	Totals.
Remaining Sept. 30, 1914,	–	11	24	–	3	1	–	–	–	–	39
Men,	–	5	3	–	–	1	–	–	–	–	9
Women,	–	6	21	–	3	–	–	–	–	–	30
Admitted within the year,	64	76	19	15	96	15	29	41	45	1	401
Men,	7	9	3	–	2	2	1	1	7	–	32
Women,	57	67	16	15	94	13	28	40	38	1	369
Whole number of cases within the year,	64	87	43	15	99	16	29	41	45	1	440
Dismissed within the year,	17	23	8	3	37	6	2	12	15	–	123
Men,	5	4	3	–	–	2	–	–	–	–	14
Women,	12	19	5	3	37	4	2	12	15	–	109
Viz.: Returned to institutions,	14	22	7	3	36	4	2	11	15	–	114
Men,	3	3	3	–	–	2	–	–	–	–	11
Women,	11	19	4	3	36	2	2	11	15	–	103
Discharged,	1	–	1	–	1	2	–	–	–	–	5
Men,	1	–	–	–	–	–	–	–	–	–	1
Women,	–	–	1	–	1	2	–	–	–	–	4
Died,	–	1	–	–	–	–	–	–	–	–	1
Men,	–	1	–	–	–	–	–	–	–	–	1
Women,	–	–	–	–	–	–	–	–	–	–	–
On visit Sept. 30, 1915,	–	–	–	–	–	–	–	–	–	–	–
On escape Sept. 30, 1915,	2	–	–	–	–	–	–	1	–	–	3
Remaining Sept. 30, 1915,	47	64	35	12	62	10	27	29	30	1	317
Men,	2	10	3	–	2	1	1	1	7	–	27
Women,	45	54	32	12	60	9	26	28	23	1	290
Supported by the State,	42	52	25	8	55	7	27	24	28	1	269
Private,	3	–	5	1	7	1	–	–	–	–	17
Self-supporting,	2	12	5	3	–	2	–	5	2	–	31
Daily average number,	30.79	54.36	27.57	6.03	41.01	6.49	17.35	24.19	18.01	0.62	226.42
Men,	2.76	7.90	2.34	–	0.54	0.33	0.75	0.75	1.76	–	17.13
Women,	28.03	46.46	25.23	6.03	40.47	6.16	16.60	23.44	16.25	0.62	209.29
State,	27.74	47.81	19.11	5.51	38.88	3.82	17.35	20.35	15.98	0.62	197.17
Private,	1.79	–	3.86	0.46	2.13	0.83	–	–	–	–	9.07
Self-supporting,	1.26	6.55	4.60	0.06	–	1.84	–	3.84	2.03	–	20.18
Number of different persons within the year,	62	81	39	15	95	16	29	40	36	1	414
Number of different persons admitted within the year,	62	72	19	15	93	15	29	40	36	1	382
Number of different persons dismissed within the year,	17	22	8	3	33	4	2	11	12	–	112

THE STATE BOARD.

PROCEEDINGS.

Fifty-five Board meetings were held during the year.

Numerous conferences with the trustees and superintendents of the different institutions were arranged throughout the year to promote harmonious action with relation to appropriations, construction and general policy.

One hundred and forty visits of inspection were made by the Board, in addition to 575 by the deputy executive officer, pathologist, assistant pathologist, assistant to executive officer, the medical director, the financial agent and the director of industries.

Twenty-five visits were made to the institutions relative to deportation matters by the deputy executive officer. One hundred and eighteen visits relative to matters of support were made to institutions by agents of the support department. Three visits to institutions, relative to family care, were made.

Careful attention has been paid to all complaints as to commitment, discharge, death or treatment of patients.

Over two hundred special investigations were made in regard to these and kindred matters relating to patients in institutions.

Dr. William T. Hanson, medical inspector, resigned on May 20, 1915, to accept a position in the insane department of the State Infirmary at Tewksbury.

Dr. A. Warren Stearns, assistant to the Board, resigned on Nov. 15, 1915, to accept a position in the out-patient service of the Boston State Hospital.

Dr. Harry C. Solomon was appointed special investigator of brain syphilis for one year, to date from Nov. 15, 1915.

A license was granted during the year to Dr. Arthur C. Doten of Worcester, to care for persons addicted to the intemperate use of narcotics and stimulants.

PLANS AND SPECIFICATIONS.

The following construction was authorized by the Legislature of 1914, plans and specifications in each case having been examined and approved by the State Board of Insanity: —

Medfield Hospital. — Constructing dispensary building (Resolves, chapter 122) approved Nov. 16, 1914.

Foxborough Hospital. — Constructing corridors, etc. (Resolves, chapter 123), approved Nov. 16, 1914.

Massachusetts School for the Feeble-minded. — Constructing barn, silo and hay barn at colony (Resolves, chapter 105) approved Nov. 16, 1914.

Wrentham School. — Constructing dormitory for 105 patients (Resolves, chapter 109) approved Nov. 16, 1914. Home for 22 employees (Resolves, chapter 105) approved Nov. 16, 1914. Farmer's cottage (Resolves, chapter 105) approved Nov. 16, 1914.

ESTIMATES OF STATE EXPENSES FOR 1916

on account of the insane, feeble-minded and epileptic amount to $5,630,585, excluding estimates for maintenance of the insane department of the State Infirmary and the Bridgewater State Hospital, whose estimates are inseparable from those of the institutions as a whole, which are supervised by the State Board of Charity. They comprise estimates by the State Board and by the State institutions.

Estimates by the State Board.

For traveling, office and contingent expenses, including the printing and binding of the annual report, ... $10,000

This estimate is $750 less than the appropriation of the previous year.

For salaries of officers and employees: members of the Board, $15,500; employees of the Board, $45,500, ... $61,000

This estimate is $1,000 less than the appropriation of the previous year.

For transportation and medical examination of State charges under the supervision of the Board, ... $10,000

This estimate is the same as the appropriation of the previous year.

For the support of State charges boarded out in families under the supervision of the Board, or temporarily absent under authority of same, ... $16,500

The decrease in the estimate for the support of State charges boarded out in families is due to a decrease in the number under the State Board, and the taking over of the boarded-out patients by the institutions in whose districts they reside.

For the support of epileptic State charges in the Hospital Cottages for Children, ... $10,000

This estimate is the same as the appropriation of the previous year.

For investigation as to the nature, causes, results and treatment of mental disease and defect and the publication of the results thereof, ... $5,000

The increase in this estimate is to provide for additional work under this appropriation.

Estimates for State Institutions

relate (1) to maintenance expenses, inclusive of repairs and improvements, and (2) to special expenditures for new buildings, additions, new furnishings and equipment in the main.

Estimates for Maintenance Expenses

of the State institutions have been submitted by the trustees, as follows: —

Comparative Estimates for Maintenance, 1916, as submitted by the Trustees.

INSTITUTIONS.	Average Number of Patients.		Salaries, Wages and Labor.	Religious Instruction.	Travel, Transportation, etc.	Food.	Clothing and Materials.	Furnishings and Household Supplies.
	1916 (estimated).	1915.						
Worcester Hospital,	1,450	1,463	$180,598	$1,232	$5,900	$95,293	$6,400	$19,910
Taunton Hospital,	1,250	1,299	135,186	1,785	8,100	75,195	11,543	22,250
Northampton Hospital,	930	944	91,952	1,324	4,925	60,323	8,849	6,670
Danvers Hospital,	1,475	1,504	164,076	1,100	8,975	85,900	9,605	17,075
Westborough Hospital,	1,240	1,278	164,584	1,624	7,128	77,453	8,170	15,000
Boston Hospital,[1]	1,600	1,559	231,888	1,456	13,720	135,510	10,710	22,900
Grafton Hospital,	1,775	1,503	177,000	2,400	10,000	98,000	17,000	25,500
Medfield Hospital,	1,630	1,654	178,824	1,532	3,514	105,769	20,308	16,637
Gardner Colony,	740	761	72,000	1,200	4,300	30,000	10,000	6,500
Monson Hospital,	1,025	984	123,750	1,588	4,185	62,170	5,275	13,110
Foxborough Hospital,	350	312	57,722	1,368	4,720	24,000	3,000	5,300
Massachusetts School for the Feeble-minded,	1,620	1,611	132,479	2,200	5,968	70,838	18,070	17,084
Wrentham School,	1,085	658	82,631	1,356	4,889	51,496	12,944	7,511
Totals,	16,170	15,530	$1,792,690	$20,165	$86,324	$971,947	$141,874	$195,447

[1] Includes Psychopathic Department.

Comparative Estimates for Maintenance, 1916, as submitted by the Trustees — Concluded.

INSTITUTIONS.	Medical and General Care.	Heat, Light and Power.	Farm and Stable.	Grounds.	Repairs, Ordinary.	Repairs and Renewals.	Totals.
Worcester Hospital,	$22,380	$27,830	$30,505	$235	$21,175	–	$411,458
Taunton Hospital,	24,900	24,470	26,907	120	9,185	$22,840	362,481
Northampton Hospital,	8,822	13,663	17,286[1]	–	9,361	1,782	224,957
Danvers Hospital,	20,150	30,380	22,550	1,975	25,060	12,850	399,696
Westborough Hospital,	19,900	31,540	21,460	480	10,810	18,890	377,039
Boston Hospital,[2]	19,230	43,000	6,130	1,755	10,400	5,500	502,199
Grafton Hospital,	13,000	39,000	23,500	700	15,100	6,800	428,000
Medfield Hospital,	16,332	31,406	23,867	500	10,867	2,900	412,456
Gardner Colony,	9,500	13,000	17,500	1,500	9,000	2,000	176,500
Monson Hospital,	10,551	25,890	14,455	250	7,880	4,330	273,434
Foxborough Hospital,	7,400	15,500	5,950	900	4,450	–	130,310
Massachusetts School for the Feeble-minded,	10,005	17,920	31,652	360	13,221	3,800	323,597
Wrentham School,	4,442	18,244	15,885	1,340	6,020	2,357	209,115
Totals,	$186,612	$331,843	$257,647	$10,115	$152,529	$84,049	$4,231,242

[1] Farm, stable and grounds.

[2] Includes Psychopathic Department.

ESTIMATES FOR SPECIAL APPROPRIATIONS

for the State institutions under the control of this Board, together with plans and specifications, have been prepared in accordance with section 4 of chapter 762 of the Acts of 1914, and are classified below.

Worcester State Hospital.

Constructing and furnishing a building for 50 patients at Hillside Farm,	$20,000

Northampton State Hospital.

Installing new engine and electric generator,	$4,300
Alteration of laundry for use as dining room for employees,	2,300
Constructing house and tower for fire hose,	4,000
Installing vacuum system,	1,200
	$11,800

Danvers State Hospital.

Constructing and furnishing nurses' home, to accommodate 61 men and married couples,	$50,000
Constructing storehouse and service building,	47,000
Constructing and furnishing industrial building,	28,500
Constructing and furnishing cottage for married officers,	3,500
Purchase of 8 acres of land,	800
	$129,800

Westborough State Hospital.

Remodeling, renovating and refurnishing female wards Nos. 1, 2, 4 and 5,	$30,000
Constructing spur track from Talbot Station to hospital power house, without land damages,	22,400
	$52,400

Boston State Hospital.

Constructing and furnishing male infirmary building, to accommodate 324 patients and 30 nurses,	$315,000
Constructing and furnishing women's custodial building, to accommodate 150 patients and 4 nurses,	140,000
Constructing and furnishing nurses' home, west group, to accommodate 84 nurses,	64,000
Constructing horse stable ($12,000), two cow barns and milk house ($12,500), and hay barn ($10,500),	35,000

Sewer and water service extension,	$5,000
Constructing and furnishing industrial building,	37,000
Fire alarm and protection,	2,500
Constructing fire escapes,	1,683
Constructing piggery,	1,800
	$601,983

Grafton State Hospital.

Addition to service building and enlarging dining room at Pines group,	$20,000
Installing heat from the central power plant for the Elms group,	23,000
	$43,000

Medfield State Hospital.

Constructing and furnishing cottage for steward,	$5,000
For improving the sewerage system,	18,000
Purchase of land,	8,000
	$31,000

Gardner State Colony.

Constructing and furnishing two buildings for disturbed patients, to accommodate 10 patients and 2 nurses each,	$15,000
Extension of water supply,	2,000
Purchase of transmission lines, Gardner Electric Light Co.,	2,500
Changes in heating system, central group,	3,000
Constructing laundry building and equipment,	22,500
	$45,000

Monson State Hospital.

Purchase of electric outfit,	$4,000
Cottage for employees,	4,000
	$8,000

Foxborough State Hospital.

Constructing and furnishing a building, to accommodate 75 acute insane patients,	$75,000
Constructing corridors to connect with corridors under construction,	12,000
Renovating wards A, B, C, D, F and G,	13,200
Constructing and furnishing three cottages, to accommodate 65 nurses,	41,000
Constructing coal trestle,	4,000
	$145,200

Massachusetts School for the Feeble-minded.

Constructing and furnishing recreation building,	$23,700

Wrentham State School.

Constructing and furnishing dormitory, to accommodate 105 inmates,	$54,000
Constructing and furnishing home, to accommodate 21 officers and teachers,	33,000
Constructing and furnishing industrial building,	22,000
Constructing vegetable cellar,	4,800
Constructing and furnishing assembly hall,	52,000
Addition to laundry and new machinery,	5,160
Purchase of land,	4,000
	$174,960

Summary of Recommendations for Special Appropriations.

Insane.

Constructing, furnishing and equipping buildings for patients and nurses,		$720,000
Number of patients provided for,	619	
Average per capita cost,	$869 66	
Number of nurses provided for,	240	
Average per capita cost,	$757	
Patients and nurses provided for,	859	
Average per capita cost,	$838 18	
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,		364,183
Total,		$1,084,183

Feeble-minded.

Constructing, furnishing and equipping buildings for patients and nurses,		$54,000
Number of patients provided for,	105	
Average per capita cost,	$514 28	
Number of nurses provided for,	–	
Average per capita cost,	–	
Patients and nurses provided for,	105	
Average per capita cost,	$514 28	
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,		144,660
Total,		$198,660

Epileptic (Sane).

Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,		$4,000

All Classes.

Constructing, furnishing and equipping buildings for patients and nurses,		$774,000
Number of patients provided for,	724	
Average per capita cost,	$818 12	
Number of nurses provided for,	240	
Average per capita cost,	$757 00	
Patients and nurses provided for,	964	
Average per capita cost,	$802 90	
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,		512,843
Total,		$1,286,843

Recommendations for Legislation.

The Board submits the following summary of recommendations for legislation: —

1. To provide for the construction of a hospital for the mentally ill of the metropolitan district.

2. To provide for the appointment of a commission to revise the laws relating to insane persons.

3. To require trained attendants to accompany certain persons committed to State institutions.

4. To limit the time within which feeble-minded persons may be received at the schools for the feeble-minded after commitment.

FINANCIAL STATEMENT.

Financial Statement of the Board for the Fiscal Year ending Nov. 30, 1915.

	Appropriations and Receipts.							
	Balance brought forward by State Auditor.	Appropriations.	Cash receipts on account of —					Totals.
			Family Care.	State Institutions.	Refunds.	Interest on Bank Account.	Licenses for Private Hospitals.	
Traveling, office and contingent expenses,	–	$10,750 00	–	–	$0 33	–	–	$10,750 33
Salaries and wages of officers and employees,	–	62,000 00	–	–	–	–	–	62,000 00
Transportation and medical examination of State charges,	–	10,000 00	–	–	3 50	–	–	10,003 50
Support of State charges boarded out in families,	–	20,000 00	–	–	–	–	–	20,000 00
Support of State charges in Hospital Cottages for Children,	–	10,000 00	–	–	–	–	–	10,000 00
For investigation as to the nature, causes, results and treatment of mental disease and defect and the publication of the results thereof.	–	2,500 00	–	–	2 50	–	–	2,502 50
Payment of damages and other expenses incurred in the taking of land for the Boston State Hospital, chapter 65, Resolves of 1911.	$3,803 76	–	–	–	–	–	–	3,803 76
Transferred from the appropriation for extraordinary expenses, chapter 613, Acts of 1908, and chapter 535, Acts of 1909.	1,258 24	–	–	–	–	–	–	1,258 24
Cash received in reimbursement for the support of patients and for licenses for private hospitals.	–	–	$859 78	$53,049 00	–	$69 20	$150 00	54,127 98
	$5,062 00	$115,250 00	$859 78	$53,049 00	$6 33	$69 20	$150 00	$174,446 31

Financial Statement of the Board for the Fiscal Year ending Nov. 30, 1915 — Concluded.

	Expenditures and Remittances.				
	Expenditures from Appropriations.	Balance.	Paid to State Institutions.	Paid to State Treasurer.	Totals.
Traveling, office and contingent expenses,	$9,355 57	$1,394 76	-	-	$10,750 33
Salaries and wages of officers and employees,	58,213 32	3,786 68	-	-	62,000 00
Transportation and medical examination of State charges,	7,374 26	2,629 24	-	-	10,003 50
Support of State charges boarded out in families,	16,050 51	3,049 49	-	-	20,000 00
Support of State charges in Hospital Cottages for Children,	9,427 45	572 55	-	-	10,000 00
For investigation as to the nature, causes, results and treatment of mental disease and defect and the publication of the results thereof.	2,458 95	43 55	-	-	2,502 50
Payment of damages and other expenses incurred in the taking of land for the Boston State Hospital, chapter 65, Resolves of 1911. Transferred from the appropriation for extraordinary expenses, chapter 613, Acts of 1908, and chapter 535, Acts of 1909.	5,062 00	-	-	-	5,062 00
Payments of cash received in reimbursement for the support of patients and for licenses for private hospitals.	-	-	$53,049 00	$1,078 98	54,127 98
	$108,842 06	$11,476 27	$53,049 00	$1,078 98	$174,446 31

FAMILY CARE OF THE INSANE UNDER THE STATE BOARD.

Under chapter 504, section 71, Acts of 1909, the Board places in private families certain suitable inmates of the institutions under its supervision. For a full report of this work as conducted by the Board and by the trustees of certain institutions, see page 152.

THE SUPPORT DEPARTMENT.

It is the duty of this department to ascertain whether the patients committed to the various State hospitals for the insane, and also the institutions for the epileptic and feeble-minded, as public charges have a legal right to remain in said institutions. If they are aliens and have no such right, and have landed in the United States within three years of their commitment, investigation is made as to the liability of their deportation by the United States Immigration authorities, and the result of such investigation is reported to the deportation department of the Board. If in the United States more than three years and in Massachusetts less than five years, such aliens are reported to the deportation department for deportation by this Board. Under the provisions of section 69 of chapter 504 of the Acts of 1909 "the board may also remove any pauper inmates of institutions under its supervision who are not subject to the orders of a court to any country, State or place where they belong." If native-born and having no claim upon this Commonwealth for support, investigation is made to determine upon what State, if any, they have a claim, and when so determined this is also reported to the deportation department for their action.

The financial condition of those entitled to remain is investigated, and if there are means legally available and sufficient to warrant it, the patient is reported to the hospital, to be supported privately at a rate to be determined by the hospital authorities. If the means are not sufficient for that purpose, a reimbursing rate is made by this department and submitted to the Board for approval.

The following statement shows the detail work of the department: —

Visits to the hospitals,		116
Histories taken at the hospitals,		3,317
Visits to relatives of patients and others for investigation,		1,764
Cases submitted for deportation by the United States Commissioner of Immigration,		140
Cases submitted for deportation by the Board,		241

Support Cases.

Cases pending Nov. 30, 1914,	396	
New cases,	772	
		1,168
Made private,	90	
Made reimbursing,	351	
Accepted as State charges,	385	
Pending Nov. 30, 1915,	342	
		1,168

Private Cases.

Cases pending Nov. 30, 1914,	23	
New cases reported to hospitals,	101	
		124
Reported by hospitals as having been made private,	90	
Made reimbursing,	9	
Dropped, accepted as State charges,	3	
Pending Nov. 30, 1915,	22	
		124

Reimbursing Cases.

Cases remaining Nov. 30, 1914,	741	
New cases,	351	
		1,092
Made private of the above,	6	
Died,	73	
Discharged or on visit Nov. 30, 1915,	138	
Dropped, accepted as State charges,	75	
Remaining in hospitals Nov. 30, 1915,	800	
		1,092

Number and Board Rates of Reimbursing Patients for the Year ending Nov. 30, 1915.

INSTITUTIONS.	Daily Average Number.		Average Weekly Per Capita Rate.	Number Oct. 1, 1915.		United States Deportation Cases.	
	Males.	Females.		Males.	Females.	Daily Average Number.	Average Weekly Per Capita.
Worcester Hospital,	32.93	65.26	$3 14	30	68	.40	$14 00
Taunton Hospital,	34.08	61.15	3 43	31	44	–	–
Northampton Hospital,	43.10	55.58	3 34	38	50	–	–
Danvers Hospital,	51.88	93.39	3 36	48	90	–	–
Westborough Hospital,	25.81	60.68	3 33	32	64	–	–
Boston Hospital,	21.75	57.72	3 53	33	83	2.36	14 00
Grafton Hospital,	30.16	35.44	3 48	22	30	–	–
Medfield Hospital,	13.73	35.44	3 29	11	34	–	–
Gardner Colony,	4.52	4.54	2 88	6	6	–	–
Monson Hospital,	10.70	20.56	2 78	14	21	–	–
Foxborough Hospital,	7.30	3.28	3 72	9	5	–	–
School for the Feeble-minded at Waltham,	6.61	4.41	3 34	5	5	–	–
Wrentham School,	2.12	5.87	2 60	3	6	–	–
Mental Wards, State Infirmary,	.50	2.91	2 93	–	4	–	–
Bridgewater Hospital,	3.57	–	3 60	6	–	.65	5 00
Family care,	–	6.38	2 59	–	6	–	–
Totals,	288.74	512.62	3 32	288	516	3.40	–

Receipts for Support of Reimbursing Patients.

Location of Patients.	Year ending Nov. 30, 1914.	Year ending Nov. 30, 1915.	Total since Jan. 1, 1904.
Worcester Hospital,	$17,249 81	$16,305 27	$191,812 03
Taunton Hospital,	13,638 40	16,950 52	146,478 99
Northampton Hospital,	14,287 10	16,140 57	149,924 05
Danvers Hospital,	25,540 37	25,356 61	248,801 43
Westborough Hospital,	16,448 37	14,992 00	149,735 31
Boston Hospital,	13,668 07	16,201 58	81,353 91
Grafton Hospital,	9,362 36	11,883 09	77,694 58
Medfield Hospital,	8,443 21	8,409 77	97,048 41
Gardner Colony,	1,307 03	1,356 51	11,961 15
Mental Wards, State Infirmary,	633 28	519 47	11,700 40
Bridgewater Hospital,	394 57	839 01	5,730 65
Monson Hospital,	3,527 28	4,527 34	30,714 75
Foxborough Hospital,	1,958 18	2,038 53	9,105 46
School for the Feeble-minded at Waltham,	1,613 44	1,913 96	7,527 52
Wrentham School,	855 73	1,081 32	3,476 15
Hospital Cottages,	-	-	673 37
Family Care,	1,604 65	859 78	11,834 73
Foxborough (labor),	139 72	-	3,370 45
Almshouses,	-	-	923 66
Totals,	$130,671 57	$139,375 33	$1,239,867 00

Average Number and Percentages of State, Reimbursing and Private Patients during the Year ending Sept. 30, 1915.

	State.		Reimbursing.		Private.		Total Average Number.
	Average Number.	Percentage.	Average Number.	Percentage.	Average Number.	Percentage.	
Insane: —							
Public institutions,[1]	12,495	89.23	757	5.41	751	5.36	14,003
Family care,	123	84.25	8	5.48	15	10.27	146
Totals, public,	12,618	89.18	765	5.41	766	5.41	14,149
Private institutions,	-	-	-	-	418	-	418
Totals, public and private,	12,618	86.62	765	5.25	1,184	8.13	14,567
Other classes: —							
Public institutions,[2]	2,773	96.32	38	1.32	68	2.36	2,879
Private institutions,	-	-	-	-	62	-	62
Totals, public and private,	2,773	94.29	38	1.29	130	4.42	2,941
Insane and other classes,	15,391	87.91	803	4.59	1,314	7.50	17,508

[1] Includes voluntary sane patients, inebriate women, etc.
[2] Includes feeble-minded and sane epileptics.

DEPORTATIONS.

There were considered for deportation 468 cases, compared with 440 for the previous year. The Board deported 91 to other States, 18 to other countries, — in all, 109. In addition, the United States Immigration Commissioner deported 85. Altogether, 194 have been deported since Dec. 1, 1914.

Since Oct. 1, 1898, 2,197 persons have been deported by the Board, of whom 62 returned once, 12 twice and 1 four times. Of those returning, 12 are now in institutions in this State.

Details of the disposition of cases under consideration for deportation are shown in the following table: —

	State Board.			United States Immigration Commissioner.			Totals.			Totals.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	1914.	1915.	Increase.
Cases pending Nov. 30, 1914,	38	27	65	9	10	19	47	37	84	86	84	2[1]
Since reported,	167	78	245	81	58	139	248	136	384	354	384	30
Total cases under consideration,	205	105	310	90	68	158	295	173	468	440	468	28
Deported,	62	47	109	42	43	85	104	90	194	283	194	89[1]
Viz.: Other States,	54	37	91	–	–	–	54	37	91	80	91	11
Other countries,	8	10	18	31	29	60	39	39	78	147	78	69[1]
Special cases not landed under immigration laws, and pending deportation,	–	–	–	11	14	25	11	14	25	56	25	31[1]
Discharged,	25	17	42	4	1	5	29	18	47	19	47	28
Viz.: Care of friends,	13	15	28	1	–	1	14	15	29	16	29	13
Escaped,	8	2	10	3	1	4	11	3	14	2	14	12
Returned to penal institutions,	4	–	4	–	–	–	4	–	4	1	4	3
Died,	6	4	10	2	–	2	8	4	12	10	12	2
Withdrawn,	–	–	–	3	–	3	3	–	3	22	3	19[1]
Viz.: Private patients,	–	–	–	–	–	–	–	–	–	5	–	5[1]
Rejected by Immigration Commissioner,	–	–	–	3	–	3	3	–	3	17	3	14[1]
Dropped from further consideration,	12	9	21	–	–	–	12	9	21	22	21	1[1]
Viz.: Impracticable to deport,	4	5	9	–	–	–	4	5	9	11	9	2[1]
No place to go,	8	4	12	–	–	–	8	4	12	11	12	1
Total cases closed,	105	77	182	51	44	95	156	121	277	356	277	79[1]
Cases pending Nov. 30, 1915,	100	28	128	39	24	63	139	52	191	84	191	107
Viz.: Under sentence,	7	–	7	1	–	1	8	–	8	11	8	3[1]
Not in condition to deport,	7	6	13	1	1	2	8	7	15	14	15	1
Awaiting action,	28	11	39	6	7	13	34	18	52	59	52	7[1]
Delayed because of war conditions,	58	11	69	31	16	47	89	27	116	–	116	116

[1] Decrease.

TRANSFERS.

Ten hundred and fifty-nine patients have been transferred within the year: 790 between public institutions; 214 between public institutions and families; 43 between public and private institutions; and 12 between private institutions.

THE FINANCIAL DEPARTMENT.

The following is submitted as the report of the financial department for the twelve months ending Nov. 30, 1915. The income of the institutions is almost entirely derived from appropriations granted by the Legislature; therefore the work of this office is largely the analysis and modification of their expenditures.

These expenditures are by law and practice divided into "special" and "maintenance."

Special Appropriations.

Special appropriations are for additions to and extensions of plant, and there was expended during the year $288,605.66. A classification of this expenditure is given in Table No. 8 on page 307, headed "General Statement of Special Appropriations." Chapter 762, Acts of 1914, contains in section 5 the following provision: —

> The board shall, subject to the approval of the governor and council, select the site of any new institution and any land to be taken or purchased by the commonwealth for the purposes of any new or existing institution under its supervision. The board shall have charge of the construction of any new building at any institution now or hereafter placed under its supervision and shall determine the design thereof. . . .

This was a somewhat radical change from the pre-existing law under which the control of these operations was in the hands of the several Boards of Trustees. The Board was therefore given direct power over the expenditure of sums of money devoted to these purposes where formerly it had supervision only. In other words, it was given power to purchase

and contract directly for the supplies and work incident to the constructive work authorized by the Legislature of 1915.

Adequate provision has been made for the keeping in suitable form records pertaining to this work, the filing of the contracts, bonds, bills, etc. Each set of specifications, after having been duly prepared, has been advertised, bids tabulated, the contracts and bonds executed, examined and placed on file, the orders approved, bills audited, charged and certified for payment in proper form.

The following is a curtailed statement of the status of these appropriations Nov. 30, 1915: —

Construction of a dining room and service building at Grafton Hospital: advertised for bids; opened Aug. 16, 1915; six bids received; award of contract made September 16; amount of contract,	$30,900 00
Electric work,	1,361 00
Plumbing,	3,480 00
Heating and ventilating,	2,763 00
Extension of hot and cold water system at Grafton Hospital: by arrangement with the superintendent, work to be done by patient labor, under the direction of institution mechanics; amount expended Nov. 30, 1915,	1,226 58
Constructing dispensary building at Medfield Hospital: advertised for bids; opened August 19; fifteen bids received; contract awarded September 3; amount of contract,	16,997 00
Heating: advertised for bids; opened August 19; eight bids received; contract awarded September 7; amount of contract,	2,498 00
Plumbing: advertised for bids; bids opened August 19; four bids received; contract awarded August 24; amount of contract,	1,198 00
Constructing sewerage system at Gardner Colony: advertised for bids; opened August 19; thirteen bids received; all rejected because in excess of appropriation; by arrangement with superintendent, work to be done by him through patient labor under direction of institution mechanics; amount expended Nov. 30, 1915,	2,228 86
Purchase of Hiram Ray Estate, Gardner Colony: amount expended Nov. 30, 1915,	7,181 00
Construction of a water system at Monson Hospital: by arrangement with the superintendent, work to be done by patient labor under his supervision; amount expended Nov. 30, 1915,	668 03

Connecting corridors, Foxborough Hospital: advertised for bids; opened September 2; ten bids received; all bids rejected because in excess of appropriation; readvertised; second opening September 16; eight bids received; awarded September 16; amount of contract, . . .	$35,460 00
Installation of electric wiring (same appropriation as above), Foxborough Hospital: bids requested; opened September 15; two bids received; awarded September 16; amount of contract, ...	1,955 00
Construction of hay barn at the Templeton Colony of the Massachusetts School for the Feeble-minded: by arrangement with superintendent, work to be done by patient labor under his supervision; expended to Nov. 30, 1915, ...	1,626 66
Construction of a cottage for 15 patients at Templeton Colony of the Massachusetts School for the Feeble-minded: by arrangement with superintendent, work to be done by patient labor under his supervision; expended to Nov. 30, 1915, ...	1,787 00
Erection of employees' home, Wrentham School: advertised for bids; opened August 12; eight bids received; contract awarded August 25; amount of contract for construction, ...	9,375 00
Plumbing for employees' home: bids opened August 12; three bids received; all rejected because in excess of appropriation; by arrangement with superintendent, this work to be done by patient labor under the supervision of the institution mechanics.	
Heating and ventilating employees' home; bids opened August 12; five bids received; all rejected because in excess of appropriation; by arrangement with superintendent, this work to be done by patient labor under the supervision of the institution mechanics.	
Total amount spent on employees' home Nov. 30, 1915, .	3,873 00
Erection of Dormitory O, Wrentham School: advertised for bids; opened August 12; ten bids received; awarded to lowest bidder August 19; September 23 lowest bidder failed to furnish bond; therefore award was rescinded and given to next highest bidder; amount of contract,	33,056 00
Plumbing in Dormitory O: bids opened August 12; two bids received; both rejected because in excess of appropriation; superintendent arranged to have work done by patient labor under supervision of institution mechanics.	
Heating and ventilating dormitory O: bids opened August 12; three bids received; all rejected for same reason applying to plumbing.	

Electric work in Dormitory O: bids opened August 12; three bids received; contract awarded August 19; amount of contract,	$1,281 00
Total amount spent on erection of Dormitory O, Nov. 30, 1915,	2,590 49
Erection of farmers' cottage, Wrentham School: advertised; bids opened August 12; eight bids received; arrangements made with superintendent whereby institution should do the work under his supervision; nothing spent to Nov. 30, 1915.	
Boiler plant extension at the Wrentham School: bids opened August 12; three bids received; contract awarded August 19; amount of contract,	5,521 00
Metropolitan State Hospital: amount expended to Nov. 30, 1915,	70,600 16
Purchase of land and preparation of plans for a school for the feeble-minded in the western part of the State: nothing spent to Nov. 30, 1915.	

It is too early yet to state how far the desired co-ordinization, standardization and unification of buildings has extended or what possibilities of economy in purchase due to centralization of orders lie latent in the new law, as it has not been operative for a sufficiently long time to make observations on these points of any value (many of the appropriations for this work were not enacted until late in the spring of 1915).

In addition to this money directly controlled and expended by the Board the institutions have spent $179,961.86 toward the completion of work which was unfinished at the time of the enactment of the statute above alluded to, and which was, therefore, not subject to its provisions. The effect of this expenditure upon the State's capital investment is displayed in the inventory. The total inventory Nov. 30, 1914, was $17,212,251.59. The total inventory Nov. 30, 1915, was $17,610,837.84, or an increase of $398,586.25. The detail of this is given in Table No. 3, "Inventory of State Institutions."

Maintenance Appropriations.

The total gross expenditure for maintenance for 1915 was $3,808,048.66. The total gross weekly per capita cost of maintenance was $4.72. The net weekly per capita cost in 1915 was $4.69; in 1914, $4.65, or an increase of $0.04. These per capita are distributed as follows: —

	1915.	Change from 1914.	
		Increase.	Decrease.
Salaries, wages and labor,	$1.985	$0.0026	-
Food,	1.113	.0540	-
Clothing,	.154	-	$0.009
Furnishings,	.199	.0160	-
Heat, light and power,	.378	-	.056
Repairs and improvements,	.210	-	.011
Farm, stable and grounds,	.296	.0100	-
Miscellaneous,	.356	.0380	-

The largest increase is in food, $0.054. The stock of food on hand at the close of 1915 was $110,014.36; on hand at the close of 1914, $88,669.51, or an increase in stock of $21,344.85. This increase in stock is an appreciable factor in the per capita increase. A brief summary is given below of the market condition in prices of food in 1915 compared with those of 1914.

Average Market Quotation from Boston Chamber of Commerce Bulletin.

	1914.	1915.
Bacon (per pound),	$0.199	$0.186
New York hand-picked pea beans (per bushel),	2.380	3.260
Butter, western creamery firsts (per pound),	.272	.274
Eggs, western firsts (per dozen),	.262	.256
Flour, standard first patent spring (per barrel),	5.390	6.930
Ham (per pound),	.171	.146
Mutton (per pound),	.076	.092
Potatoes (per bushel),	.795	.511
Salt pork (per barrel),	23.030	20.840
Beef sides (per pound),	.127	.129
Sugar, granulated (per hundredweight),	4.830	5.580
Coffee (per pound),	.126	.109
Tea (per pound),	.160	.183
Molasses (per gallon),	.332	.337
Evaporated apples (per pound),	.095	.074
Fowls, western dry-packed (per pound),	.184	.177
Hogs, 140 pounds, dressed (per pound),	.126	.112

It is apparent, therefore, that while many commodities are lower in price, some (those of which the institutions are large purchasers), such as beans, flour, beef, lamb and butter, have been higher. This also tends to increase the per capita.

Moreover, the institution farms produced 16 per cent. less than in the previous year. This difference is about $73,931.96, and added to the food cost. The institution farms present some contrast in produce per acre, as will be seen by the following table: —

	Acres of Woodland.	Acres of Mowing.	Acres of Tillage.	Value of Farm Production, 1915.					Value of Production per Acre, excluding Woodland and Pasture.
				Acres of Pasture.	Total Acres, Farm.	Value of Production during Year.	Value of Production per Acre, including Woodland.	Value of Production per Acre, excluding Woodland.	
Worcester Hospital,	182	84	111	64	441	$42,239 00	$95 78	$163 08	$216 61
Taunton Hospital,	50	92	70	95	307	36,154 25	177 77	140 68	223 17
Northampton Hospital,	93	110	100	185	488	54,271 37	111 21	137 39	258 43
Danvers Hospital,	40	176	79	188	483	56,168 53	116 29	126 79	220 27
Westborough Hospital,	193	43	247	194	677	41,294 31	61 00	85 32	142 39
Boston Hospital,	7	120	57	–	184	21,660 14	117 72	122 37	122 37
Grafton Hospital,	362	208	160	180	910	37,391 35	41 09	68 23	101 61
Medfield Hospital,	233	54	63	16	366	39,200 59	107 10	294 74	335 05
Foxborough Hospital,	20	3	38	21	82	9,684 57	118 10	156 20	236 21
Gardner Hospital,	750	80	118	580	1,528	42,134 75	27 57	54 16	212 80
Monson Hospital,	287	152	51	81	571	27,850 93	48 77	98 07	137 20
School for the Feeble-minded,	1,428	287	–	209	1,924	45,216 73	23 50	91 16	157 55
Wrentham School,	220	39	71	140	470	18,042 61	38 39	72 17	164 02
Totals and averages,	3,865	1,448	1,165	1,953	8,431	$471,309 13	$55 90	$103 22	$180 37

The institutions have averaged to give the following daily per capita quantities of food: —

Meats (ounces),	6.370[1]
Farinaceous foods (ounces),	12.200
Potatoes (ounces),	9.750[1]
Eggs (ounces),	1.047
Milk (pints),	1.100
Butter and butterine (ounces),	1.414
Cheese (ounces),	0.123
Sugar (ounces),	2.630
Tea (ounces),	0.187
Coffee (ounces),	0.306

The increase in *Miscellaneous* is due to a change in custom which has become prevalent among the institutions in that they board out in private families certain persons who in the judgment of the medical staff may be benefited by such treatment. Their board is included under this heading.

The decrease in per capita in *Heat, light and power* of $0.056 is to be attributed to the following causes: a decrease of $8,166.61, or approximately 9 per cent., in the stock of coal on hand at the institutions; a decrease in the average price of bituminous coal at New York of 3 cents per ton; a decrease in the average price of anthracite coal of approximately 5 cents per ton, counteracted by only a very slight increase in freight and transportation charges.

The other changes in per capita cost for the various headings are minor, and are attributable to changes in stock on hand and the varying market conditions.

Standard Specifications and Combined Purchases.

The institutions have formulated and adopted standard specifications on the following commodities of which they made united purchases during the last fiscal year.

Electric Lamps. — This group of institutions required some 30,000 lamps. It is the custom in the electric lamp trade to have a standard list price, and to give a discount proportioned to the size of the order. By uniting with other large purchasers among the State departments, the insane group of

[1] One institution not included; data not at present available.

institutions, although the largest buyers, could obtain a still greater discount. Accordingly, a combination was effected with the Massachusetts Board of Education, Board of Charity, Prison Commission, Metropolitan Water and Sewerage Board, and the Massachusetts Agricultural College, for the purchase of a year's supply. By entering in with these other buyers the institutions increased the discount which they would have obtained had they bought alone. The approximate amount of money involved in this purchase was $10,000. The discount obtained was 39 per cent. The previous year's discount was 36 per cent., when the hospitals under the control of the Board purchased independently of the others. The saving of 3 per cent. is not altogether attributable to the combination, as there has been a slight decrease in the price of lamps.

Beans. — There were required approximately 2,550 bushels; specifications, New York or Michigan hand-picked pea beans. Twenty-seven firms were furnished with specifications and blanks upon which to bid; fourteen replies were received. The award was to the lowest bidder; the price was not the same to all the institutions, as delivery conditions affected it. The price paid was about 25 cents per bushel higher than the previous year, whereas the market price averaged 88 cents per bushel higher. The purchase was made in the month of December, in which month the quotation was lower than at any other time during the year. It may, therefore, be claimed that the purchase was well timed and advantageous. As in the previous year, it was ascertained that less than 50 per cent. of the dealers cared to bid on the order. Those who gave their reasons for not bidding stated that the order was larger than they cared to handle.

Butterine. — Approximately 57,000 pounds were required. The specifications were as follows: product to be a good grade of oleomargarine made from neutral lard and oleo oil; to contain a minimum of 10 per cent. butter fat derived from sound butter, cream or milk; to contain not over 10 per cent. vegetable oil; to contain not less than 2 nor more than 3 per cent. of salt, and not over 12 per cent. of water in the finished product. Twenty-one concerns were communicated with and given specifications and blanks on which to bid; eleven re-

sponded. Their bids were accompanied by samples, and seven, upon being subjected to analysis, were found not to comply with specifications and were therefore eliminated from the contest. The lowest bidder's quotation was 15 cents per pound less one-half per cent. for cash in ten days. This bid was accepted and a bond and contract duly filed. This covered a three months' supply.

In arranging for a second purchase the period covered was extended to six months, and the above specifications were readopted, they having been found satisfactory. Sixteen bids were received from as many concerns, and were accompanied by samples. Only five of these samples passed the test of analysis. The others were accordingly not considered. The sample accompanying one of the bids contained 29.6 per cent. butter fat. The next highest butter fat content was 21.4 per cent., and none other exceeded 12.9 per cent. Therefore it was decided to make the award to the bidder whose sample showed the best analysis, although the price was not the lowest, it being the advice of the chemist and the consensus of opinion of all concerned that this was decidedly the most advantageous purchase. A contract and bond were duly filed. Although the deliveries of butterine were in the main satisfactory, yet several of them from time to time did not comply with the specifications. This matter was taken up with the contractor and adjusted on the basis of price deductions. The amount of this adjustment was approximately $275.

Cotton Cloth. — Requirements: approximately 60,000 yards. Specifications: two grades; first, not less than 68 threads per inch of warp and not less than 68 threads of filler to the square inch; to weigh not less than 4¾ ounces per square yard of finished product; it shall have a tensile strength of 40 pounds to the warp and 50 pounds to the filler. Second grade: not less than 64 threads to the square inch of warp and not less than 64 threads to the filler; to weigh not less than 4½ ounces to the square yard; a tensile strength of 46 pounds to the warp and not less than 48 pounds to the filler. Thirteen concerns called for specifications and blanks; nine bid; no one firm was successful in getting the entire business of all the institutions. The awards were to the lowest bidder for each.

Eggs. — Approximately 80,000 dozen required. Sixteen bids were received, and the award was to the lowest bidder for each institution. The price paid was about $3\frac{3}{4}$ cents higher than the previous year. Although the average price of eggs for the year was $\frac{6}{10}$ of a cent per dozen less in 1915 than in 1914, yet in April, at the time this purchase was made, they averaged about $1\frac{1}{10}$ cents higher. The April quotation was not the lowest for the year, eggs going down in June and July 1 cent lower than this, but April eggs are considered to be the best for storage purposes.

Coal. — The bids on bituminous coal were publicly opened and read at the Boston State Hospital on Tuesday, May 25, at 2 P.M.

Bids were received from twenty-four concerns, many of whom bid upon all the institutions. Ninety-three bids were considered.

Previous to the opening of the bids the following advertisement appeared in three issues (May 15, 17 and 18) of the Boston "Globe," "Post," "Herald" and "Transcript"; Worcester "Post," "Telegram" and "Gazette;" Springfield "Union" and "Republican;" and on May 18 in the Boston "American:" —

The 13 institutions under the supervision of the State Board of Insanity invite bids for approximately 47,000 tons of semi-bituminous steaming coal of good quality and 6,800 tons of birdseye coal. In each case the ton is to mean 2,240 pounds. Bids may be submitted for the supply of coal to each or all or any group of the institutions above referred to.

Combined forms of bids and specifications for all the institutions may be obtained from E. R. Libby, Room 6, State House, Boston, Mass., on or after Monday, May 17, 1915, and only bids on these forms and containing without alteration all the information asked for will be considered. The right is reserved to reject any or all bids.

A bond satisfactory to each institution may in each case be required, not to exceed 20 per cent. of the amount of the contract.

The proposals should be enclosed in an envelope sealed and addressed to the Coal Committee of the Associated Purchasing Agents, care of the Boston State Hospital, Dorchester Center, Mass. Bids must be signed by the bidder and left at this place before 10 o'clock in the forenoon on Tuesday, May 25, 1915, with a certified check for 4 per cent. of the total amount of the contracts bid upon, such check being made payable to the Commonwealth of Massachusetts, to be and become the property of the

same if the terms of the bid after acceptance are not carried out; or at the option of the bidder, and in lieu of the check above mentioned, he may accompany his proposal by a bond of which he is the principal and a reputable surety company is surety (personal sureties will not be accepted), said bond running to the Commonwealth of Massachusetts. The conditions of the said bond shall be that if the bidder does not carry out the terms of his proposal the check named herein shall be forfeited to the Commonwealth aforesaid.

Bids will be publicly opened and read at the Boston State Hospital hereinbefore mentioned at 2 o'clock on Tuesday, May 25, 1915. All coal dealers desirous to do so are hereby invited to attend.

MELVILLE L. STACY,
WILLIAM E. ELTON,
ELMER R. LIBBY,
CHARLES E. WARD,
Coal Committee.

Sixty-nine sets of specifications were either given out or mailed to dealers from this office.

The total cost of advertising was $164.71; the pro rata cost was $12.67.

This coal was bought upon definite specifications calling for a certain number of heat units per ton. In order to determine if deliveries complied with these conditions, 103 analyses have been made of coals as received; and as a result thereof seven institutions have obtained price reductions or so-called penalties of $452.76. The other six institutions received in every instance coal which complied with specifications.

This appears to furnish quite conclusive evidence that under none other than a carefully and rigidly drawn contract, coupled with a system of analysis, would the institutions receive the quality of coal for which they contracted or be enabled to make adjustment for inferior deliveries.

Butter. — Requirements: approximately 68,000 pounds; bids solicited; quality asked for: creamery extras as per the specifications of the Boston Chamber of Commerce, butter to be inspected by an official of this body. Owing to the varying delivery conditions, the price quoted for each institution was not the same. The contract was in each instance awarded to the lowest bidder, and the price paid averaged from 2 to 3 cents higher than that of the previous year. The average

market quotation for 1915, however, was only two-tenths cent higher than that for 1914. This purchase was made in June, and the market afterward dropped 3 cents below the price prevailing in that month. It would, therefore, appear that the purchase was not made at the most opportune moment so far as price is concerned, although June and July are considered the most favorable months in which to make purchases of butter for storage purposes.

The other combination purchases of staples are of minor importance so far as quantity and the amount of money involved are concerned, and are not, therefore, thought to be of sufficient importance to warrant detailed description.

GENERAL MATTERS.

NEW LEGISLATION.

The following acts and resolves relative to the institutions and persons under the charge of the Board were passed by the Legislature of 1915: —

GENERAL ACTS, CHAPTER 68.

AN ACT TO MAKE THE FOXBOROUGH STATE HOSPITAL A STATE HOSPITAL FOR THE INSANE.

Be it enacted, etc., as follows:

SECTION 1. The Foxborough state hospital is hereby made a hospital for the care of the insane and shall be subject to all the provisions of law applicable to such hospitals.

SECTION 2. This act shall take effect upon its passage. [*Approved March 17, 1915.*

GENERAL ACTS, CHAPTER 79.

AN ACT TO MAKE THE WORCESTER STATE ASYLUM A HOSPITAL FOR THE INSANE AND TO CHANGE ITS NAME.

Be it enacted, etc., as follows:

SECTION 1. The Worcester state asylum is hereby made a state hospital for the care of the insane and shall be subject to all provisions of law applicable to such state hospitals.

SECTION 2. The name of the Worcester state asylum is hereby changed to the Grafton state hospital.

SECTION 3. Section fourteen of chapter five hundred and four of the acts of the year nineteen hundred and nine, as amended by chapter four

hundred and forty-two of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the words: "Worcester state asylum" and inserting in place thereof the words: — Grafton state hospital.

SECTION 4. On or before the first day of August, nineteen hundred and fifteen, the governor, with the advice and consent of the council, shall appoint seven persons, five of whom shall be men and two of whom shall be women, who shall constitute the board of trustees of the Grafton state hospital, and who shall hold their offices, one until the first Wednesday of February, nineteen hundred and sixteen, one until the first Wednesday of February, nineteen hundred and seventeen, one until the first Wednesday of February, nineteen hundred and eighteen, one until the first Wednesday of February, nineteen hundred and nineteen, one until the first Wednesday of February, nineteen hundred and twenty, one until the first Wednesday of February, nineteen hundred and twenty-one, one until the first Wednesday of February, nineteen hundred and twenty-two, or until their successors are appointed and qualified. Said trustees shall have all the power and authority over the Grafton state hospital now exercised by the present trustees over the Worcester state hospital and the Worcester state asylum, and shall be subject to all the provisions of law relating to trustees of state hospitals for the care of the insane, but the trustees of the Worcester state hospital and the Worcester state asylum shall continue to exercise the duties of trustees of the Grafton state hospital until their successors are duly appointed and qualified, as hereinbefore provided, and thereafter shall exercise the duties of trustees of the Worcester state hospital only.

SECTION 5. This act shall take effect upon its passage. [*Approved March 18, 1915.*

GENERAL ACTS, CHAPTER 136.

AN ACT RELATIVE TO THE SERVICE OF WARRANTS AND PROCESSES FOR THE APPREHENSION AND COMMITMENT OF INSANE PERSONS AND OTHERS.

Be it enacted, etc., as follows:

Warrants and all other processes which are issued by a judge for the apprehension or commitment of insane persons, or of persons subject to dipsomania or inebriety, or who are addicted to the intemperate use of narcotics or stimulants, or of feeble-minded persons, or of persons subject to epilepsy, may be directed to and served by a court officer, by any sheriff, deputy sheriff, constable or police officer, or by any private person whom said judge may designate; and such warrants and processes may run into any county in which any of said persons to be apprehended or committed may be found, and any of such officers or persons to whom such warrants and processes are directed may serve the same in any part of the commonwealth. [*Approved April 3, 1915.*

GENERAL ACTS, CHAPTER 73.

AN ACT RELATIVE TO THE COMMITMENT OF DIPSOMANIACS AND PERSONS ADDICTED TO THE INTEMPERATE USE OF NARCOTICS AND STIMULANTS.

Be it enacted, etc., as follows:

SECTION 1. Section fifty of chapter five hundred and four of the acts of the year nineteen hundred and nine, as amended by chapter five hundred and fifty-eight of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the words "any male", in the fifth line, by striking out the words "except the Norfolk state hospital", in the seventh line, and by inserting after the word "any", in the same line, the words: — male or, — so as to read as follows: — *Section 50.* Any of the judges named in section twenty-nine and the justices of the municipal court of the city of Boston may commit to the Norfolk state hospital, the McLean hospital, or to a private licensed hospital or house, or to any hospital or licensed receptacle for the insane, public or private, any male or female, who is subject to dipsomania or inebriety either in public or private, or who is so addicted to the intemperate use of narcotics or stimulants as to have lost the power of self control; but no such commitment shall be made until satisfactory evidence is presented to the judge by whom the proceedings for commitment are heard that such person is not of bad repute or of bad character apart from such habits of intemperance. The magistrate who receives the application for such commitment shall examine on oath the applicant and all other witnesses, shall reduce the application to writing and cause it to be subscribed and sworn to by the applicant. He shall cause a summons and copy of the application to be served upon such person in the manner provided by section twenty-five of chapter two hundred and seventeen of the Revised Laws. Such person shall be entitled to a hearing, unless after receiving said summons he shall in writing waive a hearing; and in that case the magistrate may issue an order for his immediate commitment to said hospital without such hearing if he is of the opinion that such person is a proper subject for its treatment and custody. The commitment may be made forthwith, if the examining physician certifies the case to be one of emergency. A person committed as aforesaid may be detained for two years from the date of his commitment and no longer.

SECTION 2. This act shall take effect upon its passage. [*Approved March 17, 1915.*

GENERAL ACTS, CHAPTER 170.

AN ACT TO EXTEND THE TIME WITHIN WHICH THE NEW BUILDINGS AT THE GRAFTON COLONY OF THE WORCESTER STATE ASYLUM SHALL BE COMPLETED.

Be it enacted, etc., as follows:

SECTION 1. Section two of chapter six hundred and seventy-nine of the acts of the year nineteen hundred and twelve, as amended by chapter four hundred and fifty-six of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the word "sixteen", in the third line, and inserting in place thereof the word: — seventeen, — so as to read as follows: — *Section 2.* The said buildings shall be completed and ready for occupation not later than January first, nineteen hundred and seventeen; and upon the completion and equipment thereof, the trustees shall cause to be transferred from the said Worcester state asylum to the said buildings at the Grafton colony, patients to the number of four hundred.

SECTION 2. This act shall take effect upon its passage. [*Approved April 16, 1915.*

GENERAL ACTS, CHAPTER 174.

AN ACT RELATIVE TO THE TEMPORARY CARE IN CERTAIN INSTITUTIONS OF PERSONS SUFFERING FROM MENTAL DERANGEMENT.

Be it enacted, etc., as follows:

SECTION 1. Chapter three hundred and ninety-five of the acts of the year nineteen hundred and eleven is hereby amended by striking out the word "seven", in the seventh line, and also in the thirty-first line, and inserting in place thereof, in each instance, the word: — ten, — so as to read as follows: — The superintendent or manager of any hospital for the insane, public or private, may, when requested by a physician, by a member of the board of health or a police officer of a city or town, by an agent of the institutions registration department of the city of Boston, or by a member of the district police, receive and care for in such hospital as a patient, for a period not exceeding ten days, any person who needs immediate care and treatment because of mental derangement other than delirium tremens or drunkenness. Such request for admission of a patient shall be put in writing and filed at the hospital at the time of his reception, or within twenty-four hours thereafter, together with a statement in a form prescribed or approved by the state board of insanity, giving such information as said board may deem appropriate. Such patient who is deemed by the superintendent or manager not suitable for such care shall, upon the request of the superintendent or manager, be removed forthwith from the hospital by the person requesting his reception, and, if he is not so removed, such person shall be liable for all reasonable expenses incurred under the provisions of this act on account of the patient which may be recovered by the

hospital in an action of contract. The superintendent or manager shall cause every such patient either to be examined by two physicians, qualified as provided in section thirty-two of chapter five hundred and four of the acts of the year nineteen hundred and nine, who shall cause application to be made for his admission or commitment to such hospital or, provided he does not sign a request to remain under the provisions of section forty-five of said chapter five hundred and four, to be removed therefrom before the expiration of said period of ten days. Reasonable expenses incurred for the examination of the patient and his transportation to the hospital shall be allowed, certified and paid as provided by section forty-nine of said chapter five hundred and four, as amended by chapter four hundred and twenty of the acts of the year nineteen hundred and ten, for the allowance, certification and payment of the expenses of examination and commitment.

SECTION 2. This act shall take effect upon its passage. [*Approved April 16, 1915.*

GENERAL ACTS, CHAPTER 208.

AN ACT RELATIVE TO THE SUPPORT OF STATE CHARGES IN THE STATE INFIRMARY AND THE BRIDGEWATER STATE HOSPITAL.

Be it enacted, etc., as follows:

SECTION 1. Section eighty-two of chapter five hundred and four of the acts of the year nineteen hundred and nine is hereby amended by inserting after the word "charges", in the sixth line, the following: — including insane inmates of the state infirmary and insane inmates of the Bridgewater state hospital not under orders of a court, — so as to read as follows: — *Section 82.* The price for the support of inmates, other than state charges, of the institutions mentioned in section fourteen, and of the Massachusetts School for the Feeble-Minded, shall be determined by the trustees of the respective institutions. The price for the support of state charges, including insane inmates of the state infirmary and insane inmates of the Bridgewater state hospital not under orders of a court, shall be determined by the state board of insanity at a sum not exceeding five dollars per week for each person, and may be recovered by the treasurer and receiver general from such persons if of sufficient ability, or from any person or kindred bound by law to maintain them. The attorney-general shall upon request of the said board bring action therefor in the name of the treasurer and receiver general.

SECTION 2. This act shall take effect upon its passage. [*Approved April 28, 1915.*

SPECIAL ACTS, CHAPTER 91.

AN ACT TO AUTHORIZE THE CITY OF BOSTON TO TAKE CERTAIN LAND OF THE COMMONWEALTH FOR THE WIDENING OF HARVARD STREET.

Be it enacted, etc., as follows:

SECTION 1. The board of street commissioners of the city of Boston is hereby authorized to take in fee, on such terms and conditions as may be agreed upon by said board and the state board of insanity, so much land

of the commonwealth in the Dorchester and West Roxbury districts of said city as may be necessary for the widening of Harvard street.

SECTION 2. This act shall take effect upon its passage. [*Approved February 23, 1915.*

Chapter 241. — General Act relative to the powers and duties of the State Board of Insanity and of the trustees of institutions under its charge. A copy of this act is published on page 19 of this report.

Chapter 40. — Special Act relative to reimbursement of cities and towns for loss of taxes on land used for public institutions.

SPECIAL APPROPRIATIONS.

The special appropriations for the year 1915 and for seven, ten and seventeen year periods are shown in the following tables: —

Detailed Statement.

	1915.	Seven Years, ending 1915.	Ten Years, ending 1908.	Seventeen Years, ending 1915.
Worcester Hospital,	-	$144,775 00	$299,098 44	$443,873 44
Taunton Hospital,	-	$146,300 00	$325,205 00	$471,505 00
Northampton Hospital,	-	$77,925 00	$217,300 00	$295,225 00
Danvers Hospital,	-	$17,850 00	$364,100 00	$381,950 00
Westborough Hospital,	-	$237,750 00	$454,625 00	$692,375 00
Boston Hospital,	-	$1,442,498 57	-	$1,442,298 57
For land taken by eminent domain for Boston Hospital (expended under direction of Board of Insanity),	-	$400,000 00	-	$400,000 00
Grafton Hospital: —				
Extension of hot and cold water system,	$5,000 00			
Constructing dining room and service building (to be used in connection with unexpended balance of appropriation, authorized by chapter 133, Resolves of 1913),	14,000 00			
[Resolves, chapter 124.]				
Totals,	$19,000 00	$506,100 00	$517,900 00	$1,024,000 00
Medfield Hospital: —				
Constructing and furnishing dispensary building,	$25,000 00	$97,727 00	$558,700 00	$656,427 00
[Resolves, chapter 122.]				
Gardner Colony: —				
Constructing permanent system of sewerage,	$6,000 00			
Purchase of Hiram Ray estate,	8,000 00			
[Resolves, chapter 108.]				
Totals,	$14,000 00	$105,050 00	$495,950 00	$601,000 00

Detailed Statement — Concluded.

	1915.	Seven Years, ending 1915.	Ten Years, ending 1906.	Seventeen Years, ending 1915.
Foxborough Hospital: —				
Construction and repair of corridors connecting three present ward buildings and present central dining room, including such changes as may be necessary, [Resolves, chapter 123.]	$49,000 00	$54,000 00	$173,150 00	$227,150 00
Monson Hospital: —				
Increasing supply of surface water, [Resolves, chapter 106.]	$4,000 00	$304,140 00	$431,800 00	$735,940 00
Massachusetts School for the Feeble-minded: —				
Constructing barn, silo and hay barn at Templeton Colony, [Resolves, chapter 105.]	$3,500 00	$68,500 00	$537,100 00	$605,600 00
Wrentham School: —				
Constructing and furnishing dormitory to accommodate 105 patients,	$51,000 00			
Constructing and furnishing home to accommodate 22 employees,	14,500 00			
Constructing farmer's cottage,	3,600 00			
Installation of two boilers, [Resolves, chapter 109.]	6,000 00			
Totals,	$75,100 00	$730,900 00	$247,800 00	$978,700 00
School for feeble-minded in western part of State: —				
Purchase of land and preparation of plans for a school for the feeble-minded in the western part of the State,	$50,000 00	$50,000 00	–	$50,000 00
Hospital for the insane in the metropolitan district: —				
Preparation of plans, etc., for a hospital for the insane of the metropolitan district,	$15,000 00	$115,000 00	–	$115,000 00
State Infirmary,	–	–	$120,000 00	$120,000 00
Bridgewater Hospital,	–	$90,000 00	$235,000 00	$325,000 00
Purchase of Boston Insane Hospital,	–	$1,000,000 00	–	$1,000,000 00
For removal of Worcester Asylum to Grafton Colony,[1]	–	$400,000 00	–	$400,000 00

Summary of Special Appropriations.

Insane: —				
Constructing, furnishing and equipping buildings for patients and nurses,	–	$1,728,527 00	$2,207,525 00	$3,936,052 00
Number of patients provided for,	–	1,974	2,992	4,966
Average per capita cost,	–	$736 78	$596 27	$652 12
Number of nurses provided for,	–	365	651	1,016
Average per capita cost,	–	$750 99	$650 49	$686 60
Patients and nurses provided for,	–	2,339	3,643	5,982
Average per capita cost,	–	$739 00	$605 96	$657 98
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	$124,000 00	$1,857,018 57	$1,733,886 44	$3,590,905 01
Totals,	$124,000 00	$3,585,545 57	$3,941,411 44	$7,526,957 01

[1] Name changed to Grafton State Hospital.

Summary of Special Appropriations — Concluded.

	1915.	Seven Years, ending 1915.	Ten Years, ending 1906.	Seventeen Years, ending 1915.
Feeble-minded: —				
Constructing, furnishing and equipping buildings for patients and nurses,	$65,500 00	$599,000 00	$425,500 00	$1,024,500 00
Number of patients provided for,	105	1,068	840	1,908
Average per capita cost,	$485 71	$480 80	$435 12	$460 69
Number of nurses provided for,	22	131	82	213
Average per capita cost,	$659 09	$652 07	$731 70	$683 09
Patients and nurses provided for,	127	1,199	922	2,121
Average per capita cost,	$515 74	$499 58	$461 50	$483 02
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	$63,100 00	$250,400 00	$359,400 00	$609,800 00
Totals,	$128,600 00	$849,400 00	$784,900 00	$1,634,300 00
Epileptic (sane): —				
Constructing, furnishing and equipping buildings for patients and nurses,	–	$87,000 00	$152,550 00	$239,550 00
Number of patients provided for,	–	150	192	342
Average per capita cost,	–	$560 00	$732 03	$656 57
Number of nurses provided for,	–	4	27	31
Average per capita cost,	–	$750 00	$444 44	$483 87
Patients and nurses provided for,	–	154	219	373
Average per capita cost,	–	$564 93	$696 57	$642 22
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	$2,000 00	$61,570 00	$63,350 00	$124,920 00
Totals,	$2,000 00	$148,570 00	$215,900 00	$364,470 00
Inebriate: —				
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	–	$5,000 00	$35,517 00	$40,517 00
All classes: —				
Constructing, furnishing and equipping buildings for patients and nurses,	$65,500 00	$2,414,537 00	$2,785,575 00	$5,200,102 00
Number of patients provided for,	105	3,192	4,024	7,216
Average per capita cost,	$485 71	$642 83	$596 11	$601 72
Number of nurses provided for,	22	500	760	1,260
Average per capita cost,	$659 09	$725 22	$651 94	$681 01
Patients and nurses provided for,	127	3,692	4,784	8,476
Average per capita cost,	$515 74	$653 98	$583 27	$613 50
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	$189,100 00	$2,173,988 57	$2,192,153 44	$4,366,142 01
Totals,	$254,600 00	$4,588,515 57	$4,977,728 44	$9,566,244 01
Average amount appropriated annually,	–	$655,502 22	$497,772 84	$562,720 03
Purchase of the Boston Insane Hospital,	–	$1,000,000 00	–	$1,000,000 00
Removal of Worcester Asylum to Grafton Colony,	–	$400,000 00	–	$400,000 00
Totals,	$254,600 00	$5,988,515 57	$4,977,728 44	$10,966,244 01

SEMIANNUAL CONFERENCES.

The thirty-third semiannual conference of the Board and the trustees of the different institutions was held at the State House on May 25, 1915. Dr. Michael J. O'Meara, chairman of the Board, presided. The subject for discussion was: —

Diet of Patients.

1. The diet of patients in the State hospitals, with a view —

(*a*) To reducing the amount of meat used.

(*b*) To determining whether it is advisable for the State Board to outline a dietary or establish a standard bill of fare to be adopted by all the State hospitals.

2. Where does the responsibility rest when discharged patients commit homicide or other deeds of violence?

The views of the different speakers as expressed at this conference were as follows: —

Dr. Michael J. O'Meara, chairman, State Board of Insanity: — Ladies and Gentlemen: The first subject for discussion today is "The diet of patients in the State hospitals: discussed with a view (*a*) to reducing the amount of meat used, and (*b*) to determining whether it is advisable for the State Board to outline a dietary or establish a standard bill of fare to be adopted by all the State hospitals."

Chapter 762 of the Acts of 1914 effected a substantial change in the powers hitherto possessed and exercised by the State Board of Insanity. In addition to supervisory powers the Board now exercises the elements of control, section 2 of this act specifically providing that "it shall have charge of all insane, feeble-minded and epileptic persons and of persons addicted to the intemperate use of narcotics or stimulants, the care of whom is vested in the commonwealth by law, and of all institutions or buildings now or hereafter owned or maintained by the commonwealth for the care of such persons." It is obvious that the effect of this act is to centralize far-reaching responsibilities in the Board.

Because of its enlarged powers and a duty incident to them, the Board is attempting to co-ordinate and standardize the various activities in all the State hospitals, and to enforce, as far as possible, general policies and methods of procedure, so that differences and inequalities of service shall cease and the accomplishment in all lines of activity in each hospital shall be the same as in every other hospital, to the end that all patients under the charge of the Board shall be treated the same, no matter where placed, and a definite and common standard of care be maintained.

In this connection it is interesting to note the following inequalities brought out by a survey of the food supplies for the different State hospitals, made by Mr. Charles E. Ward, the treasurer of the Board. For purposes of comparison he has taken two institutions, one with a population of 72 in excess of the population of the other.

In the former, $10,400.96 was expended in 12 calendar months for butter ($3,424.36 for pure butter and $6,976.50 for butterine), while in the second and smaller institution $14,811.91 was expended for butter. In the same length of time 17,732 dozen eggs were bought by the first institution, and 27,195 dozen by the second; 2,085 barrels of flour compared with 1,584 barrels; 61,798 pounds of fish compared with 67,273 pounds. The first institution used only 220,420 pounds of meat in one year, while the smaller institution consumed 330,588 pounds of meat; 91,301 pounds of granulated sugar were bought by the first, and 99,075 pounds by the second. The cost of tea for one institution was $750, for the other, $500; for coffee, $1,245 compared with $1,159. The weekly per capita cost of maintenance in the hospital with the larger population was $4.59, while in the other it was $4.89. The following variations existed in the per capitas of purchases and products for the year ending Nov. 30, 1914: —

	Highest.	Lowest.
Butter and butterine,	$8 74	$4 54
Beans,	1 19	34
Cereals,	1 42	58
Cheese,	1 32	06
Flour,	7 79	2 86
Fish,	2 54	1 39
Meats,	18 94	8 99
Molasses,	25	08
Granulated sugar,	3 15	1 44
Tea,	1 31	28
Coffee,	1 61	62

Owing to part being produced on the place, we give the consumption per capita instead of cost on the following articles: —

	Daily Average per Capita.	
	Highest.	Lowest.
Eggs (ounces),	2.61	.58
Milk (pints),	1.55	.88
Potatoes (ounces),	13.36	5.13

We cannot ignore the significance of facts. We point them out, not to be critical, but to stimulate discussion and try to arrive at a common point of view as to the best means to pursue to create common standards.

The first speaker is Dr. French.

Dr. Edward French, superintendent, Medfield State Hospital: — I am requested by the State Board of Insanity to present to this conference the following subject: "The diet of patients in the State hospitals, with a view to reducing the amount of meat used, and also whether it is advisable for the State Board to outline a dietary and establish a standard bill of fare to be adopted by all the State hospitals."

The diet of patients in State institutions varies considerably throughout the different hospitals. If our dietary is compared with that of the other States there is a greater difference. The first part of this subject, "the diet of patients in the State hospitals," can be safely left to the conclusions which will arise from the consideration of the second clause, that is, "the reduction of the amount of meat used."

Outside of the acute curable cases the great mass of patients in the hospitals are of the chronic type. The consideration of the diet, however, makes it necessary to consider the acute cases, sick cases, and patients who do outside labor in classes by themselves. The great mass of the demented, chronic type that are permanent residents in the hospitals, who do not do severe labor, are those that the proposed reduction will affect.

This last class, because of its size and because of the physical condition and state of health, is the one in which a change in diet and the reduction of the amount of meat is most feasible. I conclude there are two aspects to this question. First, the effect upon the patient's health, contentment, and so forth, and second, the economical aspect. The other clause under consideration, "whether the State Board should outline the dietary and establish a standard bill of fare," has, besides these two aspects, a third one.

Besides the effect upon the patients and the economical aspect there is the convenience and practicability of the standard bill of fare to be also considered. I think we will all admit that the acute cases, the sick and those patients doing hard work should have a generous diet, according to their various needs.

The great mass of chronic patients, possibly 12,000, do not need meat twice a day, and would be better off from a health point of view if it were given less often. Very many of them cannot properly digest meat. The dements do not masticate it properly, and there are others who lack the necessary teeth, and in many cases they cannot be provided with artificial teeth, as they would soon lose them or destroy them.

Meat, in such cases, should be fed in the form of soups, or finely divided, like hashes, hamburg steak, and so forth. Too much meat tends to the increase of uric acid, and in the great

mass of chronic patients where digestion, assimilation and some of the other vital functions are lowered in tone, this causes diseases which result from an excess or non-elimination of uric acid. It has even been claimed that a meat diet results in arteriosclerosis. If this were true (but I believe it has not been proved) it would tend to the reduction of asylum populations by cerebral hemorrhages.

Some substitutes for meat are possible, such as the use of cheese, beans, etc., but unfortunately nearly all the foods which are largely nitrogenous are difficult of digestion; and while the necessary needs of the system can be supplied by cheese and beans, these two articles are quite as difficult of digestion as meat.

I would not go as far as one western superintendent has done. He has limited the breakfast of the chronic, non-working patients to oatmeal six days in the week. What they have on the seventh day, I do not know, but I presume some other mush. He claims that he has improved the health of his household in this way. I think he has gone too far, and that a golden medium can be adopted, reducing the amount of meat to at least once a day for chronic cases, and giving it in such form as will be easily digested, such as soups, hashes, minced beef, hamburg steak, etc.

The second aspect of the case, its economy, does not need any argument, as nitrogenous foods are more expensive than any other class of foods. I believe firmly in a general bill of fare for all the institutions of the State under the State Board of Insanity. Not only do I believe it possible that the physiological needs of our patients can be met in a better manner, but that it would result in a considerable saving in money. There is no question in my mind as to its convenience and practicability. No hospital superintendent likes to depart very widely from the road traveled by the other superintendents in similar institutions. He would meet with considerable criticism from his patients and from the friends of his patients, and it would be practically impossible for him to oppose the sentiment and custom that have prevailed in the institutions in Massachusetts. If, however, he could have the backing of the State Board in this, and could say that the bill of fare of his institu-

tion was practically the same as that employed in all of the institutions, and that it was authorized by central authority, he would be in a position to meet the outcry which would result from any radical change. It would also strangle those sporadic political forays known as "investigations" as far as dietary conditions in our institutions are concerned.

What we eat is of great importance to all of us, sane or insane, and it grows in importance as we grow older.

The patients in our institutions who travel in a very small mental circle, and who have but little to break the monotony of their lives, think a great deal about what they have to eat, and it looms very large on their mental horizon. Consequently we need a backing of central authority.

In conclusion and summing up, I firmly believe that it is advisable to reduce the amount of meat used in our State hospitals, leaving out the three classes of acute, sick and hard-working patients, and making separate bills of fare for these classes; also that it would result in considerable saving. I believe it desirable for the State Board to outline a dietary on physiological grounds, which should be adopted by all the institutions similar in character under that Board.

Dr. Ernest V. Scribner, superintendent of Worcester State Hospital: — In considering hospital diets I have excluded from consideration the menu furnished for the higher paying private patients, which is quite often dictated by their personal desires rather than by the necessities or real requirements of the situation. Many painstaking and exhaustive experiments have been undertaken by various investigators to determine the nutritive value of certain articles of diet. From the result of their experiments Hutchison, in his work on "Food and Dietetics," has deduced an average of requirements establishing a standard which he regards as suitable "for a man of average build and weight, doing a moderate amount of muscular work." This diet gives as the standard amounts in grams of the different nutritive constituents required daily, 121 proteid, 59 fat, 510 carbohydrates; in terms of calories, 3,135. This standard, in practical application, should be considered intelligently, being raised or lowered in accordance with the estimated needs of each class of persons under consideration. The calories of

the army and navy diet are somewhat in excess of the above figures. It should be borne in mind, however, that in the army and navy we are dealing with young persons in the vigorous and active period of life, while the hospitals have to do with the infirm and with persons quite often of middle or advanced life. The majority of our patients have been persons of moderate or even restricted means. We may well ask, Should we have fed them above the standard of their former life? My answer is, Yes, if that standard was too low; No, if it was too high.

Having accepted the standard as above outlined, the question which we are asked to consider is how we can reduce the amount of meat used and still preserve the balance of the ration so that the patient shall be equally well nourished and preserve his physical and mental energy. Experiment and analysis have determined the proteid values of various articles of food, and it is comparatively easy to refer to almost any of the tables of dietaries published in the standard works on dietetics, and find foods which will furnish a proteid and fat equivalent which will in some measure take the place of meat. This substitute food, however, must be chosen with intelligence, both that we may preserve the nutrition of the body and that we may also reduce the cost of the ration, which is becoming more and more a matter of prime necessity. Among such substitute articles may be mentioned beans and peas (particularly when furnished in the form of soup), macaroni, fresh and salt fish, eggs and plenty of milk. Experiment has demonstrated that dietaries in which milk is abundantly supplied are less costly and quite as acceptable as some others. The general results of a milk diet, as found in some observations of the United States Department of Agriculture, indicate that "milk should not be regarded as a luxury, but as an economical article of diet which families of moderate income may freely purchase as a probable means of improving the character of the diet and of cheapening the cost of the supply of animal foods."

While calories represent the scientific requirements as called for by our experiments, after all, the supreme test is to give food of sufficient nutritive value prepared and presented in a

way that will not only nourish the body but satisfy the palate.

Not to intrench further upon the special field of the professional dietitian, and turning to the practical side of the question, it is probable that too little attention has been paid in the past in the average institution to the proper preparation of meat before it is sent to the kitchen for cooking. It is not sufficient that the meat should be cut up into suitable shapes and sizes. Good meat cutting is a real art, and a man who understands his business will prove most economical and satisfactory in the long run. Hire a competent man, even if you have to pay him more.

At the Worcester Hospital it was formerly the practice to cook the roasts with the bones in, and send the whole thing to the different dining rooms to be served there. This serving had often to be done by inexperienced and sometimes indifferent persons who did not carve to the best advantage, with the result that the bones as returned to the kitchen represented too much waste and, having been already once cooked, had lost much of their nutritive value for the preparation of soups, which was practically the only way in which they could be utilized. Now all meat is boned before being cooked, and nothing but clear meat sent to the dining rooms. This not only very materially lessens the waste in serving, but leaves the green bones in the kitchen to be used in the preparation of soups and broths. This practice has secured considerable economy in the purchase of meat.

Then, again, there is the physiological test. Independent of calories, food must be presented in such form and condition as to be easy of digestion, and thus capable of transferring its latent energies into the activities of human life.

I believe that it would be of assistance to the institutions if the State Board would outline some dietary or bill of fare which would meet with its approval. This outline should be of a general nature, not mandatory at first, and sufficiently elastic to permit of each hospital profitably using the articles of food which it could best produce to advantage on its own farm. It would also be of advantage to indicate what qualities and kinds of foods would be approved, — for instance, if the use of butterine in place of butter would not be regarded

as desirable; if standard issues of meat, sugar, tea, coffee and perhaps other articles should be made. I do not, however, think that a central board should attempt any specific planning of particular meals, neither should it limit the issues of home-raised farm and garden products. In this regard I believe that the Board could assist better in an advisory than in a mandatory capacity.

Henry P. Frost, M.D., superintendent of Boston State Hospital: — I shall contribute a very brief discussion, since I find, as Dr. Scribner did, that there is little room for argument over what has been said. I thought it might possibly be useful to call attention, although it may not be necessary, to the very elaborate statistics made for the State Commission in Lunacy in New York by Professor Atwater of Wesleyan University, and special agent of the United States Department of Agriculture. That was an inquiry extending over five years and producing four or five reports, the last one, in the thirteenth report of the New York Lunacy Commission, 1901, a very complete and detailed report extending through some 300 pages. That was a very practical as well as scientific investigation of this whole subject of dietaries for the insane. The data had to be collected in the institutions because there were, previous to that inquiry, no accurate data applicable to just our problem. I believe that the State of Massachusetts could save a great deal of expense, as far as the investigation of this question is concerned, by adopting certain of the recommendations of Professor Atwater, which were adopted in New York and have had the test of many years' experience. Professor Atwater found, what no doubt any investigator would find here, that there is a very large shrinkage and waste of food, much of which he believed to be unavoidable, but by no means all of it. He calculated that something like $300,000 a year was wasted in food in the hospitals in New York State. How much they have saved since I do not know. The immediate effect of his investigation was a reduction of the ration, — a 15 per cent. reduction in the meat allowance right off and later a further reduction.

As to just how our dietaries in Massachusetts compare on a basis of calories, I do not know, because we have never

had our dietaries calculated in that way. When I took charge of the Boston State Hospital I was satisfied that the meat ration, anyhow, was decidedly low, and all the experience I have had with meat since then has been in raising the meat allowance. That, I think, has been very largely in consequence of increasing the activity of the patients, getting more employment, and so it is a logical procedure.

At the present time I feel that our meat ration, while as liberal as any in the State, is below the standard allowance in New York. I doubt whether there is very much room for reduction in the meat allowance; at least, that is a question which would have to have careful study.

It is of course possible to make substitutions for meat if you want to get into trouble. The most logical thing to do is to substitute fish, for which we are very favorably situated in Massachusetts. I tried that last year when we had too little money to buy meat, and it certainly upset the institution more than anything else that was ever attempted. People *should* like fish, but they do not like it more than once a week.

I am very heartily in favor of the State Board establishing a standard. I do not think they should make out a bill of fare to be followed day by day, but I think they might very well establish a standard ration at the hospitals, and the institutions would conform to it quite closely. They would then have exactly computed the amount of meat and fish and flour or cereals, and of fruit and all the various standard items of diet in per capitas, and they would have an opportunity to make as great a variety of dietaries from those materials as possible. It would not need any compulsion to get the hospitals to conform to such a standard ration, I am sure. All that we need to have it is to know that it has the approval of the recognized authority.

Dr. Arthur V. Goss, superintendent of Taunton State Hospital: — With the permission of the conference, I will discuss the second proposition, as to whether it is advisable to have the State Board outline a dietary.

I think this is desirable, myself, and I agree with those who have spoken, especially with Dr. French and Dr. Scribner, who suggested that the dietary established by the Board

should not be an ironclad one, but a flexible one, allowing for the difference in the location and local surroundings of the different institutions. For instance, an institution near the coast can to better advantage utilize more fish in its diet than one situated in the western part of the State, and, on the other hand, institutions far from the seacoast could not with advantage use as large a proportion of fish in their dietary as those near the seacoast. For instance, the Taunton Hospital, during the herring run season, uses a pretty liberal fish diet of the best quality, but it would not be feasible for an institution that was not situated where it could send its teams right down to the fishery and get the fish alive and have them cooked before many hours after they are out of the water. When prepared in that way fresh herring is at its best.

I do believe, in regard to our dietary, that a larger proportion of certain kinds of meat is used than is necessary. I may be a crank on the subject, but I believe that a very exaggerated idea prevails, not only in the popular mind, but in the scientific mind, as to the nutritive values of red meats. With beef and mutton, as they are cooked, even under pretty favorable conditions, there is a large element of waste, and considerable of the meat that is taken into the stomach is not utilized by the system, owing to the fact that it is practically ruined by the cooking. With steak (which is more frequently fried than broiled) a good proportion of it is wasted. On the other hand, when beef or mutton is served as stew, or potted, you get a larger proportion of nutriment from it than you do when fried, broiled or baked.

Referring briefly to the different classes outlined by Drs. French and Scribner, we will take, for instance, the infirmary or feeble patients. I think in most of our hospitals we give them more red meats than is to their advantage or is necessary, and a larger or more generous diet of milk and eggs would be decidedly to their advantage. It is true of the chronic class that they need a larger proportion of meat than the infirmary class, and also need a larger proportion of milk and eggs than is contained in some dietaries. Take the patients at the farm groups, doing work out of doors and doing hard muscular work, or in the case of the women who assist in the

more laborious and heavy part of the domestic work, such as the work in the laundry and about the kitchen, also those who work out of doors: for them a more substantial diet is required. These patients are in a pretty vigorous physical condition, and their digestive powers are as a rule excellent. They should have a generous diet, and, to my mind, these are just the patients who will be benefited by the use of some of the substitutes for red meats. There is no class of patients that would utilize to better advantage a diet in which beans, cheese and the coarser cereals are used. They need a larger quantity of food than those who are less active; they need it in a form that, while nutritious, is slowly digested. Persons performing vigorous work do not want their food digested too quickly.

John Muir, with whose works I presume you are all familiar, and who lived a very vigorous out-of-door life, experimented considerably with different varieties of food to find the food that contained the most nourishment in the least bulky form and from which he received the greatest help in his work, which, as you know, sometimes compelled him to spend many hours between meals; and after experimenting with the coarser cereals, like oatmeal, and with the fighting ration, bacon and hardtack, he finally came down to pork and beans as the very best standard diet for him.

Hon. Charles E. Ward, treasurer, State Board of Insanity: — I am glad to tell you now that I am not going to be here much longer, and to explain why. I did not hear all the papers read this morning because I was called before the ways and means committee in an effort — which some of you at least will commend if it is successful and condemn if it is not — to get a little more money for your boarded-out people. I am in hopes it will go through, and so I have been busy over there. I am soon going to a meeting of the stewards, where the coal bids are to be opened, which necessitates my not being able to enjoy the meeting with you.

I was struck with what Dr. Goss said about fish for the coast as against the interior and western portions of the State. Living, as I do, in Franklin County, I have been well aware that fish become somewhat footsore traveling from the east over the hills into the territory where I live, so that I can agree

most heartily that it is probably a better diet here than it was out there.

I would say in this connection that I have studied figures on meats because it came along with my work, and I have been struck with the wide variation in the uses of articles of value in the institutions. I have not been able yet to determine which was waste and which was otherwise, but the figures themselves are rather eloquent of a variety of methods of feeding in the institutions. How valuable these figures are going to be by further study, that we will have to determine.

I think with these few remarks, without attempting to discuss the question in any way, I will make my bow.

Dr. John A. Houston, superintendent of the Northampton State Hospital: — I agree pretty closely with most that has been said with reference to the first item under discussion. If I should follow my belief I should allow very little meat indeed to my patients, because I believe very few of them need much meat, — only the working class. I think the others would be better off without it.

It is well known that man is capable of hard work without a meat diet. Certain races use but little meat in their own country. The uniform ration for the woodchopper in the winters in the State of Maine, from Sunday to Saturday, inclusive, and from breakfast to supper, is beans, and he thrives on this diet, and seems to be satisfied. If such hard labor can be easily done on a non-meat diet, the inmates of hospitals, who sit around doing nothing, can easily get along with but little meat.

But it is not desirable, nor should it seem necessary, to arrange for our patients a diet that will merely sustain their health and answer the requirements of their physical needs. We must plan a diet that will appeal to their palates and will satisfy, not only the patients, but, if we do our duty, their relatives and the public as well. In many things done in State institutions public opinion has to be taken into consideration, and the matter of diet is one of them.

I doubt if it is feasible to establish a standard diet that will answer for all of the hospitals. At Gardner, for instance, there is a class of middle-aged patients, able-bodied as a rule,

most of whom are able to work out of doors or in shops. A simple diet would answer for this type, and every institution in the State has a large number of this class of patients who would be satisfied with the same diet. But at the hospitals that take acutely insane patients there are other classes that would not at all be suited with such a diet. For instance, we have a class that Dr. French spoke of, — the aged patients whose digestion is feeble, who have no teeth. For them we must have hashed meat, custards and soups, — things which do not require much mastication, and which are easily swallowed and easily digestible. The hospitals also have a class of acutely insane patients who almost invariably come to us under weight. Their mental excitement, prior to admission, has caused a loss in bodily weight that needs to be replaced. The experience of the different institutions shows that the prospects of recovery of such patients are vastly improved if we build up their bodily weight. For thirty years at Northampton we have kept monthly records of the weight of our patients, — in some instances more frequently, — and we find that almost without exception the acutely insane who come to us increase in weight after a short period of residence; and we also find that another thing is true, that is, that of the patients who recover, an increase in weight almost invariably accompanies the recovery, so that in arranging a diet to satisfy their needs we have to take all these things into consideration.

But if a standard diet to apply to all institutions alike is not feasible, it would seem possible for the State Board of Insanity, or for a commission appointed to study such matters, to establish units for the various articles of diet, and we should welcome this. Such a commission could well establish a standard amount, for the average patient, of proteids, whether in the form of meats, of eggs, or butter or cheese; the amount of sugar for each patient, of butter, of bread and of such things, leaving the distribution and arrangement of diet to each institution. Each institution finds by experience what satisfies the greatest number of its inmates.

In this connection there is a matter I will speak of, — the desirability of arranging the dietary so that patients will not

know on any one day what they are to have to eat. People, sane as well as insane, get tired of the same articles of diet and of things cooked in the same way, howsoever nourishing they may be. Since employing a dietitian, the old custom of a dietary made up to answer for every seven days throughout a season has been changed, so that now this dietary is changed every week. The same articles are being served, but on different days, and cooked in different ways than formerly, to the better satisfaction of patients, without increase in expense.

Dr. O'Meara: — Does any member of this conference desire to ask any of the preceding speakers any questions in regard to these subjects?

Dr. Thomas: — I would like to ask Dr. Frost if, after the study was made in New York and the dietary established, that dietary was followed and followed closely; if not, why they departed from it.

Dr. Frost: — It was followed and followed very closely, because, under the New York system, the hospitals could not purchase materials beyond the amounts computed according to that ration, and it is still followed. It was modified from time to time, according to experience. To take care of the needs of the acute cases and of the sick an increase in milk allowance was made, for instance. As I recall, the New York milk ration is 1 pint per day per person, with an additional pint for 20 per cent. of the population. The matter of eggs is specified, the amount of tea and coffee, and of butter and sugar, cheese, etc. All those things are specified and very closely followed and not exceeded. I think that they may make substitutions to some extent, and if experience dictates the advisability of serving less meat and more beans, that that is permitted. There are very comprehensive tables given showing the quantities to substitute for every one of the standard articles of diet.

I would like to ask if the figures of the State Board which Dr. O'Meara presented include a comparison of the total per capita cost of the food supplies at the different hospitals, because some of the variations merely represent substitutions of one article for another. Isn't that so? It is not an uncommon experience that one institution would serve more cheese than

another, which would be found to be balanced by a substitution of some other item. You have, of course, a comparison of the total per capita cost?

Dr. O'Meara: — In the comparison of the two institutions the per capita cost of the larger institution was $4.59, of the other $4.89, a difference of 30 cents.

Dr. O'Meara: — The underlying cause of much of the bitterness that patients exhibit towards superintendents, doctors and nurses, and of many of the complaints in regard to food and care, is the loss of liberty sustained by the patient, and the necessity of keeping him in continual custodial care.

Under present conditions a commitment to a hospital represents either a longer or shorter period of confinement, a limited or, more often, a life period of custody incident to the hospital to which the patient may be sent.

Superintendents and staffs differ in their attitude towards release, some showing so conservative an attitude as to be unwilling to bear any responsibility where patients have the slightest potentiality of wrongdoing in their make-ups. This frequently works a great injustice to the patient. A more liberal feeling and reasonableness of attitude would release many who are obviously insane, and allow them years of life outside in comfort and comfortable freedom with their friends. All the inmates of the institutions are alike under the law, and all should have equal rights and should be accorded equal privileges. Among the many privileges, none can be regarded as greater than the privilege of being at large in the community.

The State Charities Aid Association of New York reports that the reorganization of the parole system in the fourteen State hospitals for the insane has saved the State $87,000 in a year. Under this system many patients are returned to their homes, where they are frequently examined by medical experts. It is found that the home environment proves beneficial; and as the cost of maintenance for each patient is $200 per annum, the more patients released the greater the saving to the State. The parole system is being extended day by day.

On Aug. 12, 1914, the State Board of Insanity sent to all the institutions under the charge of the State Board the following letter: —

There is a feeling on the part of a portion of the community, and also on the part of the Commission on Economy and Efficiency, that there are many patients in the institutions who might be safely discharged into the community; that some of these patients, while needing oversight, might have this oversight exercised by their friends and relatives who, if willing, are competent to exercise it; and that there are others who, if they had the stimulus of liberty and self-dependence to sustain them, have sufficient potentiality of effort left to allow them to become wholly or partially self-sustaining.

Opinions of a varying character were received from all the superintendents relative to the release of patients. One superintendent wrote: —

The experience, which we not infrequently have, of learning that a patient who has escaped is getting along fairly well outside and is self-supporting shows that there is often more capacity for self-support in patients than we are aware of.

Another wrote: —

The public regards the institution not only as a hospital but as having custodial duties to protect the community from cases that are dangerous or extraordinary in behavior.

Another wrote: —

I have always felt that perhaps more patients could be discharged than are, if we had some way of finding suitable places for them to go and could give them adequate supervision until they were established in the community.

Another wrote: —

I do not know of any patients who on being discharged might prove that they could support themselves in the community.

The Board desires to stimulate the parole of all individuals in the hospitals who can live comfortably in the community, and it is ready to co-operate to sustain superintendents whenever, in the exercise of their best judgment, a patient is released and trouble comes out of it.

In the event of crime being committed, where does the responsibility rest? Can we be held concretely responsible if a

patient who has been an inmate of one of our institutions does bodily harm to a neighbor?

I think it can be shown that if we take two groups of individuals, equal in number, one group insane and the other group at large and regarded as normal, there is no more potentiality of crime in the insane group than in the normal group.

Accidents of a serious nature occur occasionally to stay our efforts to parole patients. One, time a parole patient entered the Governor's office and shot two men. The shots were intended for the Governor, and the attempt on his life was so nearly successful that the Governor and the community also blamed the hospital and desired to hold the superintendent to an accountability. A clamor was made for the resignation of the superintendent, but wiser councils prevailed; and paroles, even of obviously unrecovered patients, still continue.

Recently a patient, discharged from the Danvers State Hospital on trial visit, shot a fellow workman. It appears that some of the men in the shop where this man was employed had teased and annoyed him greatly at various times, calling him "nut," "boob," etc. This had been particularly true of the man whom the former patient shot. The authority of the hospital over the patient had ceased, but the social service department kept in touch with him, and on several occasions the man reported at the hospital clinics in Haverhill. He was discharged from the hospital April 14, 1914, and in December of that year he appeared to entertain delusions of persecution regarding the labor unions and the members of the police department of his city. In February of the following year a letter was received from him at the hospital, in which he made complaints that his mother was poisoning him. The police of Haverhill were advised that in the opinion of the superintendent of the hospital measures should be taken toward returning the patient to the hospital. He was not returned and he shot the man who teased him.

In every case where an insane patient is released on parole, difficulties are likely to arise.

I hope a free discussion of all phases of this subject may operate to lead to a greater liberality in dismissing patients on

visit, and in this way determining their ability, or lack of it, to live comfortably at large in the community.

Dr. H. O. Spalding, superintendent, Westborough State Hospital: — That the superintendent has the authority to send out of the institution such persons as he deems suitable is unquestioned. Having been given that authority he is, in the broad sense, responsible for the exercise of it, and it would seem that he must accept the responsibility at least for sending them out, and to a certain degree he may be responsible for the results and their actions subsequent to their discharge.

Note that I say *may* be responsible, for it is impossible to place responsibility in one and the same place for all cases. Each must be considered by itself and on its own merits.

Assuming that the superintendent has carefully considered the case for discharge, and in his judgment the patient is not a menace, he may have committed an error in judgment if the patient subsequently commits some act of violence, but would not be responsible beyond that, — the same as any physician is responsible for his judgment in every case. The responsibility of the superintendent is the same in considering a mental case as that of a surgeon in considering a surgical case. The surgeon decides a given case is cancer and inoperable; it proves to be a gallstone case which operation would have relieved. A case of appendicitis is considered favorable to wait for intercurrent operation; the appendix ruptures, — a peritonitis follows. A typhoid fever case is considered ready for increased diet, — a relapse follows. In all of these cases the physician was responsible for the decision; that is what he was employed for, but he made an error in judgment. No one's judgment is infallible. If the superintendent had urged upon the family the removal of the patient, his responsibility, it seems to me, is much greater than if the release was urged by the family, who say that they will take upon themselves the responsibility and promise adequate care of the patient. Then the burden may rest upon them rather than upon the superintendent. But even under these circumstances there remains, in many cases, some responsibility, for his knowledge of the mental state of the patient may be greater than that of the friends; the family themselves may be irresponsible.

Rather than talk of this responsibility in the abstract, perhaps it will be better to cite some cases.

A manic-depressive case, about thirty years, depressed and suicidal before admission, improved greatly while at the hospital. Parole was granted him, and for some weeks he worked steadily on the farm and talked cheerfully and normally of his plans for work when he should go home. The home environment, so far as could be ascertained, was not unfavorable. Finally he was permitted to go, — in fact, it was rather urged upon the family, and within a week after his return home he committed suicide. I cannot feel that in this case any blame was attached to the act of the superintendent. The case was carefully considered, and there was possibly an error in judgment, and the patient should have remained longer in hospital care.

Again, a manic-depressive, irritable, excited, hallucinated case, — an Italian, whom the family wished to take home almost as soon as admitted. After a few weeks there was a little improvement in her condition, but the requests for release continued pressing; finally a physician, who had had some experience in a State hospital, called for the family and, backed by a lawyer, represented that the family were financially able and willing to care for the patient at home, providing one or more trained attendants for her, and the physician personally offered to be responsible for her proper care. On these conditions she was allowed to go, but no attendant of any kind was provided; patient was put at work on household tasks at once, and within forty-eight hours she had assaulted members of the family, who fled into the street to save their lives. The police were called in to control patient and return her to the hospital. Fortunately, no one was seriously injured by the patient's violence. Had there been, would it have been just for the superintendent to bear the blame? He was responsible for her dismissal from the hospital, but the conditions agreed to were not kept. The public would probably hold him responsible, but he would probably feel that he had been freed of responsibility by the broken faith of the family.

Another case of acute alcoholic hallucinosis cleared up in a short time and, no mental symptoms being apparent, he was

permitted to leave the hospital with the warning expressed to both the patient and family that further indulgence in alcoholics would result in a return of mental trouble. Two months after his return home, while on a debauch, he attempted to batter his way into a man's house, for which he was promptly shot and killed by the owner. In this case, although the man was still connected with the hospital, it would not seem that the superintendent was in any way responsible, since the patient was apparently normal and could not have been legally held longer.

The last case is one where an old dementia præcox patient, who for some years had been in and out of various hospitals and sanitariums, was finally put in a private hospital, but not in a State where he had a residence. He was very actively hallucinated, had delusions of persecution, though not particularly systematized, was irritable, headstrong and difficult to control. He was the only child of a crippled and widowed mother, whose small income was inadequate to care for him in a private hospital. She could not see wherein he might be dangerous or why she could not take him when she pleased. She finally obtained permission to take him out for the day. She did not control him well while out, and although he did no violence — in fact, he had never done violence — she could only with difficulty return him to the hospital in time to prevent him from making offensive remarks to passersby on the street and to fellow travelers on the cars. She was unable to pay for him as agreed, and wished to take him out, saying she planned to return him to his native State and put him in an institution there. She was permitted to take him out; they returned to their native State, but she did not execute her plan of putting him in an institution, and finally he committed a homicide. The superintendent had permitted a patient recognized as potentially dangerous to go into the community in the care of a feeble mother, who did not do as she had said she intended to do. To what extent was the superintendent responsible for the act of this man?

Dr. O'Meara: — The Board invited Mr. Edmund A. Whitman, chairman of the Trustees of the Gardner State Colony, a lawyer, to discuss this subject and to give the legal phases of

our responsibility. Now if there is any lawyer, Mr. Whitman being absent, among the trustees who will discuss this subject for us we would be very grateful.

Mr. Sewall C. Brackett, trustee of Westborough State Hospital: — Mr. Chairman; I do not want to deny that I am a lawyer, for it might be brought up against me that I dodged my profession, of which I am most certainly not ashamed. All I could say, without some attention to the particular point involved, would be that, like very many other propositions of law, all that is required is reasonable care under the circumstances. It would undoubtedly fall in the same category as the attention which a person who is injured in an accident is bound to obtain for the purpose of curing the disability which he has received; thus a person who is injured in a collision of trains on a railroad, and receives somewhat severe injuries, is bound, no matter what claim he makes upon the railroad company, to secure the services of a reputable physician and to use reasonable care to carry out the precepts of the doctor whom he has employed; and if he employs a known charlatan, as in my experience has been the case, he cannot complain of the severity of his injuries when, had he employed a practitioner of standing, he would not have had that severe experience. But in an accident case a patient, if he employs a physician in good standing in the community, is not bound to get the best medical assistance. If the doctor is in good standing and it turns out that he did not understand his business and did not do a very good job (if I may use that word) that is not the fault of the patient. Bringing the same ideas to bear on a mental case with the physician, in the same way, if he uses reasonable care and reasonable skill his patient never can bring claim against him for malpractice. Some people have a mania for bringing such claims, and we see them in our office not infrequently. We had one last week; he had that as his constant idea to sue some doctor. If the physician uses reasonable care, of course legally, that is all he is bound to do. In preparation of a case, the fact that he might have done better is not involved in it. There is no civil liability, and without giving it any previous attention it would seem as though, after that person, having authority and bound to exercise his judg-

ment, shows reasonable skill and reasonable judgment, he certainly would not be under any legal responsibility further.

Dr. Charles E. Thompson, superintendent of Gardner State Colony: — There has been an increasing tendency on the part of quite a number of persons to declare that in our institutions are kept many who do not belong there, or who perhaps needed hospital treatment in the beginning, but should not longer be held. That number has been variously estimated, and I think the last number I heard was 1,500. The trustees, as I understand it, have the authority, under the law, to discharge, and perhaps some trustees give the superintendent authority to discharge, but I presume each Board of Trustees approves discharges.

It occurred to me, when this circular letter from the State Board was sent out, that we at Gardner, having a population of demented patients largely, might be expected to have quite a number who could be discharged, and I replied that we were making special efforts to see how many we could discharge to relatives. Getting relatives interested has been difficult. Failing in obtaining their co-operation there should be, and we already have, an organization to actively look up relatives, and urge upon them the need of their caring for these patients. However, the first two cases considered by our staff and presented to our trustees served to check us. One patient, a man who had had parole for three years, — quiet, somewhat demented; it seemed to us that here was a patient who could be discharged. We considered him carefully at staff meeting and presented our request to his wife, who said that he was an insane man; that she knew him (and apparently knew him better than we did), and that he should not be discharged. After a good deal of correspondence we presented him to the trustees, who accepted my recommendation and that of the staff that we should discharge him, in spite of the protests of his wife, and they so voted. Within two days I passed him on the sidewalk and he was muttering to himself, a thing he had not done for a year or more. We then watched him carefully, and within two months he was as insane as any man we had, and has continued so for six or seven months since then, — a patient who, had he been discharged, might have in-

jured the standing of the institution. Later we have been glad that he did not receive his discharge.

In the second case we had given the patient parole in spite of the protests of his wife. He had done well for months before and had had parole. Singularly enough, after we had decided to discharge him he had a mental upset and later escaped. Three or four days ago we found him in Rindge, N. H., surrounded by about fifty school children, handcuffed to the constable of the town, and, I must say, it was an unfortunate thing to have happen and a bad example for those children. Such things cannot help but reflect on the institution.

We did not, as it happened, discharge those two cases, but were prepared to in spite of the relatives. If we had discharged them, it seems to me the responsibility would have been upon the trustees and their staff.

On the other hand, if politicians or others (as they frequently do) urge that patients be discharged, then I think the institutions should either decline to discharge them, in which case the applicant can take out habeas corpus papers, whereby the responsibility would rest with the court, or, if a patient perhaps can get along outside, but there is reason to suspect that he will not do well, I think then the relatives or the person making the request should sign a statement that they are taking the patient against the advice of the hospital staff and will assume the responsibility. I think quite a number of institutions do that now. We do it in every case where we cannot recommend discharge. We have the relatives sign a paper stating that they will be wholly responsible and will return the patient if necessary to the institution. It happens frequently that when the patient needs to be returned they do not return him. They call us up by telephone and say that they are helpless and want us to come for the patient. Of course we always do that. For any act they commit while outside the institution we place the responsibility on the one urging the discharge against our advice. They fully understand this when they take them.

Dr. George M. Kline, superintendent, Danvers State Hospital: — We have had one or two rather unfortunate experi-

ences, one of them occurring quite recently, in which a case of paranoid dementia præcox had left the institution against the advice of the medical staff, returning to his home town, where an uncle was on the police force. We saw the patient from time to time in our out-patient department. A month previous to the incident which I will relate, we had advised the police to return this patient to the institution, his parole period having expired and the patient being formally discharged from our books. They did not do so. He wrote letters to the institution making quite evident an acute outbreak of his mental symptoms. We again took the matter up with the police of the town, urging his return, stating that we felt he was dangerous at large in the community. They went to see the patient's mother. The mother begged them not to send him back then, stating that she would exercise special care to prevent his doing any harm. He continued at his work in the shoe factory and a short time later shot a fellow workman, probably in reaction to auditory hallucinations. At once articles came out in the paper urging an investigation of the methods of the institution in discharging patients and paroling patients. Considerable feeling was created in the community against the hospital for a time, until the judge and the newspaper men came to our aid, the judge calling up before these articles came out and stating that by reason of not taking the advice of the hospital authorities they were in a bad mess with this particular case, and asking what could be done. We recommended the recommitment of the patient to the institution.

We endeavor, in discharging that class of patients, to make it fairly well known to the relatives that such occurrences may happen, and if they take the responsibility we feel that the responsibility is with them and that public sentiment would bear us out. We believe that the matter is largely controlled by public sentiment.

A case (or the newspaper account of it) came to our attention recently in the State of Washington. A case of paranoid dementia præcox left the institution against the advice of the physicians, the party removing the patient signing a statement assuming responsibility, in this instance the mother. The patient committed homicide, and in some way the superintend-

ent was brought into court and freed from any blame by the judge, in spite of the fact that he knew the patient might commit homicide and had allowed him to go in care of his mother. It also, in a way, freed the mother from responsibility and placed it nowhere. Seemingly the responsibility in such cases cannot be placed.

Dr. Albert C. Thomas, superintendent of the Foxborough State Hospital: — I am sure that each of us, whose responsibility it has been to decide, has, under varying degrees of pressure, discharged patients to the custody of friends or relatives contrary to our own judgment.

In some instances, it having been the custom of the institution from which the patient was removed, the friend or relative in question was required, and very willingly agreed, to sign a statement to the effect that the patient was being removed from hospital care contrary to the advice of the superintendent, and that said friend or relative assumed all responsibility in so doing.

Many cases could be cited where severe criticism and even civil action have resulted when such a patient, discharged under the above-described conditions, has committed some overt act. I believe it would be very helpful if we could have some expression of opinion from a purely legal standpoint as to just what legal value could be attached to such a signed statement from a friend or relative, and if, in reality, it afforded the least legal protection.

Mr. Donald Gordon, clerk of trustees, Worcester State Hospital: — Some years ago, out at the Harvard Law School, a series of questions was put to candidates for admission to see how much law they knew before they went to the law school, and one question seemed to be rather a poser for most of them. The best answer to this question was, "I should consult a good lawyer." That is exactly the way I feel. I expected to learn some law from a good lawyer to-day instead of being asked to pretend that I knew some.

As was intimated a little while ago by my brother, — who bravely volunteered to speak while I sat still and said nothing, — I think, generally speaking, that this is just the same question as comes up in the case of the ordinary professional man,

whether he be physician or lawyer; he is expected to be up to a certain standard and he is expected to use his best judgment. I do not know that any more concrete rule can be laid down for a superintendent than that. He is legally responsible if he fails in either of these two respects, and if the State Board participates in an error of judgment made by him they are responsible also. The same thing would be true of the trustees. But in the form of a rule, I know of nothing more that can be said than that superintendents have simply got to use their own best judgment, and that when they are in doubt they should never yield to outside influences. That is the legal situation.

As far as the moral situation is concerned, it is the same question as comes up every day, — a man can stand still and do nothing or a man can act. I do not know that in this matter I should follow Mr. Justice Holmes' maxim, "When in doubt, do it." I should think a more conservative course would be advisable in discharging patients. But that presents a pure question of ethics, on which all of you are better fitted to speak than I am.

Mrs. Mary A. Mahan, trustee of Foxborough State Hospital: — It seems to me that the real purpose of the State institutions is to save the public at large. I do feel, with the last speaker, that so long as the trustees and superintendent have an idea in their minds that a patient is not safe to be at large he should not be released.

Dr. O'Meara: — Are there any other questions?

Mrs. Mary E. Donahue, trustee of Monson State Hospital: — I would like to ask who is going to figure the per capita food for the patients, — the nurses and attendants, or the doctors?

Dr. Scribner: — If that question was put to me I would say I think the establishment of a certain number of calories is a matter which should be determined by a general body, or the whole medical staff, also including the technician. I think there should be a thorough discussion of that, going into the matter with the pros and cons, and not decided by an individual.

Dr. Emerson: — I would like to ask what the average per capita meat is in calories, and whether a reduction is to take place over that average, or a reduction from those showing the

largest meat consumption? I would like to ask what the average meat consumption is in calories.

Dr. O'Meara: — I cannot give the average, but can give the highest and lowest. The highest is $18.94 and the lowest is $8.99, which is the yearly per capita cost of meat purchased.

Dr. Emerson: — There, again, is another point to be considered, — the quality and cut of the meat used, whether fourths or chucks or the whole animals.

Dr. O'Meara: — I do not know as we have analyzed it carefully to know just what part of the animal is being fed. I think we know, not in detail but in a general way; but the variation for all the institutions you will find in the office if you come down after the conference.

Dr. Briggs: — I should like to say that we are now preparing tables for another conference with a committee of the superintendents and medical officers, which I hope will be in July. We have figures in the way of diet which you ask for, showing the quantities and the cost and the kinds of meat, — lamb or beef, etc., — and also the cost per capita and pound. We have been working on this for about three months. By July we will have it in such shape that we will be able to get a committee together, and it will, we think, be so evident to every one who looks at the results that we can come to some conclusions.

Dr. George A. Moore, trustee of the Monson State Hospital: — I would like to draw to your attention the question asked by Dr. Frost, as to what the study of Mr. Ward's, as read by Dr. O'Meara in the introductory paper, was supposed to bring out. Is it to bring out the wide variation in what our patients are fed upon, or intended as a basis of discussion of the cost of foods in the different hospitals? If it is intended simply to bring out such facts as that more carbohydrates are used in relation to meats in one hospital, or much more meat in relation to other articles of food in another, I can see how it is pertinent. If it were otherwise intended I would be pleased to know whether, in institutions where the dietary shows the use of a large amount of one sort of food, the cost of another was compensatorily low. For instance, where the coffee cost per capita was high, was the tea cost low?

Dr. O'Meara: — The discussion on this subject was taken up at the suggestion of the hospital superintendents. A questionnaire was sent out to determine what subjects might be suggested for discussion, and answers were received to that questionnaire from all the hospitals, and this subject was suggested. Now, what the State Board has in mind is to standardize, so far as possible, the diet for the patients in the different institutions, having in mind that the different institutions have different needs. To illustrate, at Gardner Colony, where most of the patients are able-bodied and are working in the open, a hearty diet is required, but that does not mean that they are at liberty to run their per capita cost for such articles as meat and eggs and the more expensive articles of diet up to no limit. It was to try to arrive at a common point of view in regard to what might be the best in the way of articles of diet, and to get a well-balanced diet, that this subject was selected.

Dr. Moore: — That much is very clear, and still the point remains unanswered as to whether this was intended to suggest some changes which might be necessary or simply to bring out the fact that there was a very wide variation in the feeding of the patients. You suggest in one place that the per capita cost is so many dollars for meat. In the place where a high cost for meat exists, was there a compensatory low per capita for other proteids?

Dr. O'Meara: — The figures show this conclusively, that where there was a low meat cost there was a very high bean and flour cost; and it was to emphasize the fact that in some institutions, without criticism by either employees or patients, they were getting along very comfortably on a bean and bread diet, where in other institutions they were using meat to excess, that these figures were read, and if there was any reason that might be assigned we wanted that reason brought out in the discussion.

Dr. Moore: — I think you have cleared the point I brought up. I believe it might be very easy for people to misunderstand the matter contained in the chairman's opening paper, and that it possibly might be considered a stricture upon an apparent high cost in some institutions over that in others

rather than what it is, *i.e.*, a mention of the fact that differently balanced rations are used in the different institutions.

Dr. Charles E. Thompson: — As Gardner has been spoken of three times as having a class of able-bodied patients who perhaps require meat, I might say in passing that it is shown by the tables that Gardner uses as little meat as almost any other institution (I think there are two that use less), so that perhaps, after all, it is not the question of how hard we work. We do not feed a large amount of meat. We do feed cereals, beans and a large amount of flour and vegetables, but one would expect from the discussion here that inasmuch as our patients worked hard they ought to have a good deal of meat, which is not the case. We think that our patients look well physically and they do considerable work.

Dr. Houston: — I referred to Gardner as having a type of patient that required a certain standard diet, but my remarks were evidently misunderstood in this connection. My belief is that Gardner needs less meat than any State hospital. The type of patient that we send to Gardner is better satisfied with baked beans, Indian meal, soups, hashed meats, the cheaper cuts of meat, etc., than any other class of patients we have. If this is true of these patients while at Northampton, I assume the same will be true after they have gone to Gardner. I agree with Dr. Thompson that they are better off with less meat.

There is another matter which has not entered into the discussion at all of which I should like to speak briefly. Many of the institutions have a large percentage of private patients. We have at Northampton about 1 in 7 whose friends pay us in order to have extras, and for these patients we have an extra bill of fare. For many years Northampton has had two bills of fare, one applying to about 300 patients and to officers, employees and nurses, and the other, which is the standard hospital bill of fare, applying to State patients.

Now, in making comparisons of the consumption of any article of diet, it must be taken into consideration that an institution having a large number of private patients will spend more per patient, including both private and State patients, than will some other institution; that the average

amount spent for meats, for instance, would be higher at Worcester or Taunton or Northampton than would be the case at Medfield or Grafton or Gardner, because the latter institutions do not have private patients.

Dr. O'Meara: — I think Dr. Briggs has some figures on this subject.

Dr. Briggs: — I have here a table showing the total consumption of food for the year 1913, which includes the daily average consumption of meat. This table shows the variation in the different hospitals and will perhaps answer Dr. Emerson's question.

Total Consumption of Food for the Year 1913.

Institutions.	Butter and Butterine.	Beans.	Eggs.	Fish.	Meat.	Total Eggs, Fish and Meat.	All Cereals.	Potatoes.	Flour.	Total Cereals, Potatoes and Flour.
Worcester Hospital, ...	1.5	1.0	1.5	1.8	6.5	9.8	1.4	9.9	9.7	21.0
Taunton Hospital, ...	1.6	1.1	.9	1.7	5.3	7.9	2.1	6.4	14.0	22.5
Northampton Hospital, . . .	1.0	.5	2.7	1.5	8.6	12.9	1.5	6.6	10.4	18.5
Danvers Hospital, ...	1.0	1.6	.9	1.8	8.5	11.2	1.4	13.4	9.3	24.1
Westborough Hospital, . . .	1.8	1.2	1.6	1.9	9.6	13.1	1.8	9.5	8.9	20.2
Boston Hospital, ...	1.6	.9	2.0	1.4	7.5	10.9	1.4	9.5	9.5	20.4
Worcester Asylum, ...	1.5	.9	.6	1.5	7.0	9.1	1.4	12.4	11.1	24.9
Medfield Asylum, ...	1.8	.5	.6	1.5	6.2	8.3	2.6	11.5	10.8	24.9
Gardner Colony, ...	1.1	1.1	.5	1.8	5.6	7.9	1.5	10.8	8.7	21.0
Monson Hospital, ...	1.3	.4	1.3	1.5	5.7	8.5	2.3	11.5	10.4	24.2
Foxborough Hospital, . . .	1.5	1.9	1.3	1.7	8.9	11.9	2.3	12.0	13.5	27.8
Massachusetts School for the Feebleminded.	.9	1.4	.5	1.0	5.2	6.7	3.0	9.8	10.4	23.2
Wrentham School, ...	.9	2.1	2.0	1.0	4.2	7.2	2.0	10.4	7.6	20.0
Daily average per capita consumption.	1.4	1.0	1.1	1.6	6.5	9.2	1.9	10.0	10.0	21.9

All per capitas are in ounces.

The daily ration allowance in New York State is as follows: —

Dietaries of New York State Hospitals.

Meats, 10.5 ounces.
Farinaceous foods, 13 ounces.
Potatoes, 10 ounces.
Eggs, ½ egg and ½ egg additional for 10 per cent. population.
Milk, 1 pint and 1 pint additional for 10 per cent. population.
Butter, 1½ ounces and .05 ounce additional for 10 per cent. population.
Cheese, .3 ounce.
Sugar, 2⅛ ounces.
Tea, ⅛ ounce.
Coffee, ½ ounce.
Fruit, 5½ cents per week per patient.

The thirty-fourth semiannual conference was held at the State House on Nov. 16, 1915. Dr. Michael J. O'Meara, chairman of the Board, presided. The subjects for discussion were: —

1. Social service in State hospitals for the insane: its purposes and future development.

2. Defective delinquents: in what institutions do they belong, and what should be their present and future accommodations and treatment?

The views of the different speakers as expressed at this conference were as follows: —

Dr. Michael J. O'Meara, chairman, State Board of Insanity: — The term "social service" is applied to many types of praiseworthy humanitarian activities. All of these types do not enter into State hospital work, and this discussion should determine for all of us what definite methods are to be represented in connection with State hospital social service activities.

The function of the State Board of Insanity is to unify the work in all the hospitals and to bring about common standards.

The various hospitals have had varying points of view in regard to the requirements of social service and the qualifications necessary in individuals selected to do the work. In some instances superintendents have nominated for the work individuals who have had no civil service standing. The powers of the Civil Service Commission are far-reaching, and for many years, under First Division, Official Service, Rule 6, Class

7, "Visitors, Settlement Clerks, Almoners, Interpreters" and persons doing similar work have had to be selected from a civil service list.

I hope this conference will make it plain to everybody that certain definite requirements are called for in connection with social service work in the State hospitals.

When the Boston State Hospital asked for a director of social service in the Psychopathic Department the Civil Service Commission held an examination. The examination required training and experience in social work, and preferably experience and training in connection with medical cases, particularly those relating to mental disease or defect. A physician's or nurse's training is not a requisite, and a physician or nurse cannot be employed unless certified by the Civil Service Commission.

Miss Katherine Tucker, social service director, State Charities Aid Association, New York City: — It seems very much like carrying coals to Newcastle for any one to come from New York to Boston to talk on social service work. We are so used to turning to Boston for guidance, inspiration and stimulation, as medical social service not only had its inception here, but here it has reached its highest development. However, it is true that New York has the distinction of first organizing after-care work for the insane in this country, though even here I am not sure that Boston has not far outstripped us in the splendid social work done by Miss Jarrett at the Psychopathic Hospital.

After all, social service for mental cases is really not different, in purpose or method, from any other social service except as it is a more complicated and highly specialized task, just as psychiatry is a more involved and highly specialized subject than general medicine. Social service for the mentally ill means the study and treatment of the social conditions surrounding the patient outside the hospital, with a view to adjusting these conditions so that a recovery is more possible and a recurrence less likely. The psychiatrists have defined mental diseases in terms of maladjustment; the patient has failed to be able to adjust himself to his environment. In certain instances the environment itself may be a strong causa-

tive or predisposing factor in this lack of adjustment. It is the work of the mental specialists to help the patient to build up his weakened powers so that he may better understand and control himself and his relations to the outside world. It is for the social worker to assist both the doctor and the patient in this work by studying and treating the environment, — the patient's family, his job, his home surroundings, his recreation, etc., so that irritating and unhealthful influences may be removed and the various factors in the environment become definitely healthful in character rather than negative or destructive. For a State hospital for the insane to employ an after-care or social worker means that this hospital is extending its responsibility beyond its walls because it realizes that it cannot do a thorough and effective job so long as its work and influence are limited simply to what can be accomplished upon its own ground. After all, what the hospital is trying to do is to cure or improve the condition of those suffering from a mental disease. Just as with tuberculosis, it is wasteful and shortsighted in the extreme to spend months or years of highly specialized effort upon curing a case, when at the end of that time the patient is returned to exactly the same conditions that helped to bring him to the hospital. With a mental case in particular, after living for a greater or less time in a place where life has been comparatively simple, and his adjustment has been reduced to the lowest terms, suddenly to be plunged again into the complicated, hurried, involved life of the world outside, unless some effort is made to smooth his path, — this change in itself is enough in many instances to endanger his recently recovered mental health.

But you all realize the theoretical reasons why social service is desirable or necessary in a State hospital. Probably the only contribution I can make is to enlarge somewhat upon how such work can be made practicable.

As you all doubtless know, in New York State in 1906 an after-care worker was employed, under the auspices of the State Charities Aid Association, for Manhattan State Hospital. In 1910 this work was taken over by the State, and Miss Horton, the worker, became one of the regular State employees. In 1912, through the efforts of the same asso-

ciation, Dr. Howard of the Rochester State Hospital also established such work. Since that time the State Charities Aid Association has made constant effort to have such work carried on in all the State hospitals. Recently, with the help of the State Hospital Commission, it has succeeded in interesting the Governor to the extent of his requesting, through the commission, that all the State hospitals organize out-patient departments and after-care work. I will describe the lines along which we hope to develop this system. For the most part, the method described is similar to the one adopted most successfully by Dr. Howard at the Rochester State Hospital.

If possible, it is highly desirable that the person employed as after-care worker should have had experience in social work, some knowledge of mental cases, and also knowledge of State hospitals, so that she may at once bring training and skill to the position and also readily fit into the routine of a State hospital. The reception building seems the logical and strategic place for the worker to have her office. Here she has easy and natural contact with incoming patients and their families, thus greatly simplifying her later work with the patient in the home. Also in most State hospitals the largest number of cases are paroled from the reception service, so it is easily possible for her to know every patient to be paroled. And such a knowledge is not only desirable but really necessary if the social worker is properly to perform her function. The social worker acts practically as a parole officer, having within her grasp all the facts concerning each patient on parole. In New York State the patients are paroled for six months before final discharge from the hospital; every patient to be paroled is reported first to the social worker, thus giving her opportunity to report whether home conditions are suitable for parole. Each month she knows which patients are to be discharged from parole, and through visits or letters she gets a report concerning their condition before the final discharge is issued, if possible. Such a routine system means that the medical or social needs of any patient on parole do not escape the watchful eye of the worker. She constantly assists the patient in whatever problems appear that might affect his mental condition; his family are educated to taking an intelligent and co-operative

attitude; when advisable and possible, suitable employment is found; the patient may be moved into surroundings more adapted to his needs; and above all, he is constantly encouraged and his mental strain relieved. The patients and their families are found to be most appreciative of this friendly and skilled service on the part of the hospital. For the most part they freely co-operate, and not only the particular family but the community has come to feel that the hospital represents a health-giving force in the community.

In New York, where the hospital districts are large and distances great, the task of the after-care agent is simplified as follows: the State hospitals, when necessary, are obliged to send a nurse out to help bring in a new case. Whenever such a nurse goes into a town or village she is given a list of the former patients, especially paroled patients, living in that section. By her visits to the homes and interviews with the health officer the nurse is enabled to report back to the after-care worker the condition of these patients. If more continued attention is needed, the after-care worker then takes up the case.

The social worker does more than simply follow up paroled and discharged patients. Often it is impossible for the doctors to get sufficient data in regard to a new patient. It is the function of the social worker to supplement the work of the doctor in every way possible by getting a full and accurate social history. Often the families of patients are put in a very difficult position, when either the wage earner or the mother of many children has to go to the hospital. To help solve this problem, too, or to see that some one else solves it, is one of the legitimate activities for such a worker. Through visiting the families of patients, getting acquainted with the various communities, and especially the out-patient department of the hospital, where both former patients and new patients come, the social worker comes in touch with many people not actually broken down but often on the verge.

Here, then, is a chance for real preventive work, so that the hospital may stand not only for cure, not only for prevention of a recurrence of the disease, but also may take part in the more far-reaching work of preventing the development of

the disease. I realize that this is a large program for State hospitals to undertake, and yet it will mean that these hospitals in their districts will become more than a stated place where mental diseases are treated. Their influence will reach into every section of the community. They will become centers of mental health as well as mental disease, and will take their proper place in the large preventive movements of to-day.

Donald Gordon, Esq., clerk, Trustees of Worcester State Hospital: — In my brief experience as a trustee, two facts in particular have surprised and impressed me, — first, the broad and comprehensive viewpoint now prevalently taken by insanity experts and administrators; and second, the ignorance of the general public regarding all matters connected with the insane. This ignorance is partly the public's own fault, but surely it is also, in a measure, the heritage of a day when experts and administrators, like certain of their contemporaries in the business world, were apt to think of the public, if at all, only when all other subjects failed.

That condition of affairs is fortunately becoming a thing of the past. Experts and administrators have altered and improved their institutions to an astonishing degree. Whatever these institutions may have been in the past, to-day they are something very different from the mere lockups which so many people still persistently *believe* they are. A portion of the public has at last discovered this truth, and in course of time the rest of the public will discover it also. The most significant and outstanding feature of the situation, however, is that to-day experts and administrators alike are realizing that not only is intelligent co-operation on the part of the public desirable, but that it is a *sine qua non* to the effective accomplishment of their *own* work. To neglect the general public is to neglect the very *sources* of the insanity problem.

The development of the social idea with its practical application to the insane, is a fundamental advance in clear thinking and a promising augury for the future; and no straw shows better which way the wind is blowing than the change in nomenclature from "lunatic asylum" — still a title of sinister connotation — to that of "State hospital."

Social service in connection with the insane to my mind

means three things: First, it means highly skilled and intelligent work by trained investigators in studying the history and environment of individual cases. The result of this is to put the medical staffs of the State hospitals as nearly as possible in the position of a family physician treating a private patient for an ordinary illness. This is bound to produce, and is producing, better diagnosis and more intelligent after-care. Second, it means an increased opportunity to extend the visits and boarding out of patients, which is safe only if subject to supervision to an extent hitherto impossible. The regular medical staffs of the State institutions have not the time for this work, and if the trustees have the time, in but few cases have they the necessary qualifications. Third, it means a more intimate contact with the general public. The closer the relation of the institution and the community in which it is located the better the community will understand the objects, aims and methods of the institution, and the better the staff of the institution will understand the needs of the community. Good work is a legitimate advertisement in any environment, but good work of itself is not enough. The opening of our institutions freely to visitors and to the public was a great step in the right direction; the out-patient work now inaugurated is another; but I believe that by systematic effort the time will come — and may be greatly hastened by us all — when communities will take a proper pride in their local State hospitals, and when, if not individual patients, at least the *families* of individual patients, will look upon these institutions, not as a horror, but as a *haven.*

Miss Mary C. Jarrett, chief of social service, Psychopathic Hospital: — I did not understand that I was to give a paper at this meeting. I have brought with me some facts in connection with our work, to which I may call attention. Miss Tucker has covered the subject so fully and ably that I think there is nothing I can add about the functions of social workers in State hospitals.

The movement for organized social work for the insane had its origin, it seems to me, far back, both in medical work and in social work. The social workers have always worked hand in hand with the physicians in the care of the insane. The

very first National Conference of Charities devoted the greater part of its program to the care of the dependent insane by the States, and the first address was given by a physician. The insane have always occupied a large part of the programs of the national conference.

On the other hand, the physicians of the State hospitals have always done a large amount of social work. Any one familiar with the treatment of the insane knows how necessary it is that physicians should do social work for their patients, and to what an extent the superintendents and assistant physicians have always given their patients assistance and services which were not strictly medical. But now there is a strong demand that this service which has been given to patients more or less casually, according to the interest that happened to be aroused by their cases in some particular physician, or according to the way in which the social needs were accidentally brought to light and came to the attention of the superintendent, should be now given to every patient who comes to the hospital. There seems to be no reason why every patient in a psychopathic or insane hospital should not have his social needs attended to just as well as his medical needs. He may need employment more than hydrotherapy; he may need both. But the hospitals may easily be in a position to offer him both of these services, not one only.

We wrote throughout the United States, inquiring what progress had been made in introducing social workers into the insane hospitals, sending the letter in almost every case to the superintendent of a State hospital; and in addition to the four States which now have social service, — New York, Massachusetts, Michigan and Wisconsin, — in eighteen States a desire was expressed for organized social work in connection with insane hospitals.

Now the number of workers who would be required for a thoroughly organized system of social work here in Massachusetts, it seems to me, — according to our present rate of admissions, — will not exceed 25; that means for the case work, — for the actual care of the patients. Of course, additional workers would be needed if social investigation were to be undertaken. That estimate is made on the basis of 1 social

worker being required for every 200 admissions. That may be a generous estimate, but it has been found by studying the work of the most advanced social agencies that 1 social worker in a year can supervise about 25 persons thoroughly and carefully, and can perform in addition special services in the cases of 75 others, making 100 cases for 1 social worker in a year.

At the Psychopathic Hospital we now have only 2 social workers paid by the State; and in the two and a half years that we have been working I find that we have covered adequately not quite one-fourth of the number of patients who might be expected to need our care. And this much has been made possible through the assistance of volunteer workers who have come to us for the training and experience, some giving full time and others giving one or two days a week.

Dr. George M. Kline, superintendent of the Danvers State Hospital: — The organization of a social service department at the Danvers State Hospital was primarily the outgrowth of work being done in eugenics. Not infrequently the field worker, in connection with her studies which took her to the homes of patients, was called upon to secure histories of patients whose relatives or friends did not, or could not, call at the hospital to give the desired information. Occasionally the home conditions would be investigated, and in a few instances after-care work would be done.

While the actual amount of social service work done in this way by the eugenics field worker was limited, it was sufficient to direct attention to its importance and indicate the need of a trained social worker. Accordingly, in May, 1913, the services of a graduate of the Boston School for Social Workers were secured.

Briefly, the problem, from the standpoint of the hospital, should recognize that the needs of institutional treatment are of a threefold nature: —

First, the needs of the patient. A social knowledge of the patient is quite necessary, inasmuch as contributing social factors must be borne in mind in the consideration of any case of mental disease.

Second, the needs of the institution. If the hospital is to work to the best advantage, it is obvious that full and re-

liable information regarding patients must be obtained. Social data thus acquired make it possible for hospital statistics to lead toward definite action as regards legislation relative to the treatment of mental disease. Another distinct need of the hospital is that of co-operation on the part of the community. In no other way can the forces be joined which should work toward preventive methods and toward the establishment of practical methods of after-care of patients in the community.

Third, the needs of the community. These are essentially three in number: education as to the causes, treatment and prevention of mental disease; instruction as to the after-care of patients who return to community life; the awakened sense of responsibility toward dependent or partially dependent persons who are mentally handicapped.

With these needs in mind the functions of the social service department have been developed as follows: —

First. — Home visiting.

Second. — The securing of medical and social histories of patients outside of the hospital. In many instances no history would be otherwise obtained.

Third. — Investigations of home conditions in which the question of discharge is being considered; of charges or complaints from outside sources relative to patients; of applications for patients to board; of social aspects of special diseases.

Fourth. — The connecting of needy persons with the proper agencies in the community.

Fifth. — Placing-out and boarding of patients in private families, followed by visiting.

Sixth. — Attendance upon weekly evening clinics which are held in various cities.

By reason of the many cities in the district served by the hospital, it has been impossible to carry on the social service work as satisfactorily as desired. The opening of evening clinics in six or seven of the larger centers, inaugurated under the present State Board, has conserved the time of the social worker, which otherwise would be spent in making a few visits.

It is believed that a satisfactory social service department in a large State hospital should have a head social worker and

at least four assistants: one to give her entire time to the problems of boarding out patients and supervising their care away from the institution; a second worker to have charge of the after-care work and the visiting of patients who have been released from the hospital on trial visit; one worker to secure histories and information regarding the home conditions of newly admitted patients; a fourth worker to have charge of an employment bureau for patients partially incapacitated by reason of mental disease.

The head social worker, in addition to directing the efforts of the assistants, could devote a part of her time to investigative work, an example of which might be cited: inquiry into the causation of pellagra.

In a paper that Dr. Macdonald will read at a meeting of the Mental Hygiene Society he will state that during the months of July, August and September over 1,200 persons presented themselves at clinics for medical advice, diagnosis or, in the case of discharged patients, to report on their parole. Thirty-three per cent. of this number were persons who had no previous relations with the hospital, but either came on their own initiative or were referred by physicians or other organizations.

The extent of the work being done in this department may be judged by the fact that more than 2,350 visits were made to patients on trial visits by the social workers connected with State institutions.

It is as yet difficult to measure the results of the social service department in dollars, in order to base our claims for more workers. It is believed, however, that a larger number of patients are enjoying home life because of a certain amount of supervision from the hospital through the social service work.

Certainly the educational value of the work done by this department has resulted in a marked change in public opinion and a far better regard for the hospital. It is believed that great care should be exercised in the selection of those having to do social service work.

I personally believe that a social service worker should be a graduate of some one of the schools for the training of these workers, and that before being allowed to take up actively the

work in the field, she should secure some insight into special needs of the mentally sick by a regular attendance at the staff meetings at which the diagnosis, treatment, prognosis, etc., are given consideration.

I do not believe that a physician is fitted for the work of social service unless she has received some special training in a social service school. Much harm might result from intrusting this work to one who is not tactful, who did not exercise good judgment, or who failed to approach properly those related to the mentally sick.

The establishment of an employment bureau would be a factor of great assistance in securing work for those who are in condition to leave the hospital, but who often are unable to be occupied by reason of the fact that others do not like to work with those who have been in a State hospital.

It is quite impossible to carry on this work properly with one social worker, or to do anywhere near all that should be done. The department of social service in the State hospital, based upon our experience with it at Danvers, has been one of the most important developments in the hospital organization.

Dr. Ernest V. Scribner, superintendent of the Worcester State Hospital: — I have no formal presentation of this subject that I am going to bring before you, because I think it has been so well presented by the people who have spoken before me. I am going to say that I am wholly in accord with everything that has been said, and believe that the institutions are only just beginning a work which is going to result in incalculable advantage to the Commonwealth.

My conception of the duties of the hospital for the insane is that it should promote first the recovery of its patients; if it cannot secure the complete recovery it should deal with this problem in the best way it can to return as many of its people to the community and back to self-support as possible.

It may be of interest to this audience to know that at the Worcester State Hospital, during the last few years, there has been a much greater number of persons — a greater percentage — allowed to return to the community than formerly. I have had a little investigation made to see what the results would

be. If it is a mistaken policy, — the returning of unrecovered people to the community under favorable conditions, — then you would naturally expect a greater percentage of relapses and a greater percentage of returns. For a matter of three years I have had this followed out, and find that not only has there been a larger number of cases released, but the percentage of relapses and returns, instead of being greater, has been less. That really is a result that has greatly surprised me, because I expected the returns would be greater, although I thought the proportion would be all right.

I cannot say too much in favor of the work that is being done by the different institutions inaugurated by this Board in the matter of social service. I think that in the past the institutions have cared too little what became of their patients after they left the institution. In many of the cases that the Worcester Hospital has sent out the patients have returned to the community as self-respecting and self-supporting cases. I believe that not only the work of after-care but the influence of the social work on the community, and its relation to the general public and relation to the hospital, is going to be a very beneficial one. I feel convinced that a great deal of the antipathy against institutions which exists in the community has been due to a lack of knowledge on the part of the general public of what we are doing; that is, that the institutions are not opposed to the liberties of the people, but are a method of promoting their welfare. I think that the social service work is a very important link in this; and it does seem to me that, with this end in view, the social service worker should preserve in as large a measure as possible her relation with the community. This would favor the social worker's not residing at the hospital. I think this arrangement has many advantages in that she preserves the general view of the community and is more a bond and link between us.

I indorse this whole work and believe we have just begun it; and I only wish that the State hospital over which I am superintendent might be able to enlarge this work and do more.

Dr. O'Meara: — We would like to hear from Dr. Fernald on social service.

Dr. Walter E. Fernald, superintendent of the Massachusetts

School for the Feeble-minded: — Mr. Chairman, Ladies and Gentlemen: I was not aware that I was going to be called upon in this connection. I am always impressed in listening to papers on social service work in hospitals, and I am always reminded of the fact that good hospitals have always done social service work. The opening up of the institutions, the getting the public to visit the institutions, the compelling the public to share the problems of the institutions, — these are all so obviously the things to do that we all wonder why they were not done to a much greater extent years ago.

Social service work with the feeble-minded differs, of course, a little from that with the insane. Our patients never need the resources of the school so much as they do the day after they leave us. Up to the moment they leave the school they are propped up by our experience and resources and the personnel of our staff. When they go out of our gates they are largely deprived of this backing. We are looking forward with great anticipation to the results of the work which we have inaugurated of keeping track of these patients after their discharge, and giving them assistance, advice and comfort.

I am impressed with the possibilities in the way of the preparation and distribution of literature and leaflets in a progressive follow-up plan, providing practical literature and leaflets which deal with the ordinary problems that come up in the care of the insane and feeble-minded in the community, and providing advice and directions as to home care of the discharged patients.

At the school we are just completing a survey of our discharges for the past twenty-five years. Twenty-five years takes us back to a point which includes practically all the living former patients. We have visited the patient, if possible, or the family of every patient who has been discharged in that period, and have gone into the personal, economic, moral and social experiences of these patients. The one striking thing about this survey has been the gratitude and pleasure of the friends of the patients, and of the patients themselves, at being remembered by the officers of the school. The introductory letter which we sent to all these patients and to their friends has resulted in most friendly and cordial correspond-

ence. They have expressed their surprise and pleasure that they were not forgotten. Our social workers were welcomed on their visits, and the fullest possible histories were given to them. Much gratitude has been shown for advice and help in smoothing down some of the present difficulties of these former patients.

Dr. L. Vernon Briggs, Secretary of the State Board of Insanity: — I would like to bring out three points that have been emphasized already in the work of the social service worker.

First, Dr. Kline spoke of the physician not being fitted to do social service work. Dr. Fernald speaks of their always having done social service work, and they have; but it is a different kind of work from what the social service worker does to-day. The social worker to-day does more intensive work. The superintendent could not go into the homes of the families. A hospital without a social service department cannot do as good work in any way. My idea of the social service worker of to-day is that she is a necessary adjunct to the hospital. Her functions are threefold.

In the first place, when the patient comes to the hospital she visits the home and assists the physician in making the diagnosis by getting the history of that individual; and also at the same time she starts some mental hygiene work by seeing the members of the family and the conditions under which that patient broke down, and trying to improve those conditions, not only for the sake of the remaining members, but also for the sake of the patient when he returns to his home, so that he will not return to the same conditions, if home conditions were in any way responsible for his illness. This is prevention work by the social service worker. She then obtains the history of the patient and appears at the staff meetings, or in the out-patient department clinics takes the history of the patient; and that is of assistance to the physician in the diagnosis.

Then there is the following-up or after-care work, and educating the patient to go back into the community and take up his livelihood. If in some hospitals occupational work is now developed so as to train certain individuals in occupations different from those in which they have formerly earned their living,

after-care would include following up occupational work, even to guiding them to positions where they can earn a living. Cooking classes might be introduced in the State hospitals, as Dr. Fernald has done in his hospital. A good many patients who never knew how to cook — young girls and women — can go out and take their places in their own families with a greater degree of efficiency. In other words, they may gain a great deal by residence in the hospitals, and new educational work may be brought about by visits of social service workers.

The social service worker is also, to a great extent, the mental hygiene department of the hospital, and I do believe should be trained differently from physicians. She should be so trained that she will assist the physician and supply the qualifications which the physician cannot have by his experience.

Dr. Cohoon spoke the other day of the essentials of the social service worker; that she ought to be a person who knows something about mental disease. Perhaps our future social service workers will have to take training by nursing or some other work in a hospital for the insane before they begin their social service studies.

Dr. O'Meara: — A very effective propaganda has brought defectivity to the forefront. We are all agreed as to its potential menace, but I wish the insanity laws were more definite and less confusing.

There is a pronounced differentiation between mental disorder and insanity. The term "insanity" connotes irresponsibility and covers many diseases. It is not a medical term; it is a community concept, and it bears relation, not to the character, but to the grade of the disease. It is essentially a legal word, and is used only in designation of persons whose incompetence has been determined by judicial process.

In a medical sense the individual is insane if he mistakes his imaginations for realities, and does so irresistibly and persistently, and if he reasons from false premises supplied by the phantasms of a morbid imagination. The term is used to designate cases showing one or more mental symptoms, most important among these being intellectual loss, pathological depression or exhilaration, delusions or hallucinations.

Feeble-mindedness is that state in which the mind has failed to attain normal development. It is the absence of faculties as opposed to the perversion of them. Originally it was applied to the higher grades only. At present it is used as a general term covering all degrees.

The term "defective delinquent" is applied to the individual in whom the moral irresponsibility overshadows the comparatively small mental defect. A person of this type is likely to be a menace in any community, but when confined the confinement is not for remedial treatment. Methods of a medical character have no influence in remedying the mental defect. The individual is apprehended and shut up because of anti-social propensities and moral irresponsibility.

Epileptics, inebriates and degenerates test defective, but they have insight; and because confinement follows delinquency it is regarded by them and by their friends as punishment, and, in a sense, it really is punishment.

All of these various types are found in the hospitals for the insane, and they are detained in them, not because of insanity, but because of defectivity and their potential menace to the community. The methods pursued in bringing them under restraint and the receptacles utilized to restrain them are entirely improper and of questionable legality.

The function of the physician in connection with commitments is to interpret symptoms for the judge, and determine for him whether individuals are dangerous to themselves or dangerous to the community. We all know that the ordinary physician has not the training to properly translate mental symptoms; that the work has become so highly specialized that men who have a lifelong experience in the care of the insane will not undertake to pass on conditions of mental defect, which is an entirely different branch of the work. Notwithstanding the truth of what I present to you, general practitioners still continue to regard themselves as capable of furnishing evidence upon which commitments are ordered.

Judges interpreting the law of 1867, which is the only law on the statute books defining an insane person, — the law reading, "the words 'insane person' and 'lunatic' shall include every idiot, non compos, lunatic, and insane and distracted per-

son," — commit anybody, as the judgment of the individual judge indicates, when this judgment is supported by the testimony of any two physicians who have had three years' experience in general medical practice. Each individual judge is, in a sense, a law unto himself. He is likely to take himself as the standard of measurement, and interpret the delinquent's actions in terms of what it would mean if he did the same thing. and to regard normality from the standpoint of his own personal judgment.

The law admits of elastic interpretation, and judges may be technically correct in committing defectives to State hospitals; but the interpretation and the spirit of the law should be in accord, and no interpretation can fairly ignore inherent rights. It happens that individuals are apprehended for delinquency, and if, on medical examination, it is discovered that they have a neuropathic or psychopathic background, and that they test defective, they are committed as insane, with the hope that the commitment will operate to detain them in permanent custodial care. If we believe it is just, when defectivity expresses itself in immorality or childbearing, because of the far-reaching effect of these conditions from a moral, economic and eugenic standpoint, that individuals should be subjected to lifelong detention in insane hospitals, it is the privilege and duty of each of us to agitate with the Legislature to enact a law to bring this about, and to request that body to provide proper and adequate housing facilities to meet this end.

The law is now invoked to apprehend delinquents and to commit them, when they are not insane, to the State hospitals. Individuals of this type are not properly classified in hospitals for the mentally ill, and their presence is unfair and disturbing to those who are properly classified. They hinder the work of the hospital; in fact, they are an absolutely demoralizing influence. The same is true of their influence in the schools for the feeble-minded. They are so disturbing that the hospital physicians separate and distribute them on the chronic wards. If they express dissatisfaction by manifestations of ill temper or refusal to work, they are disciplined by transferring them to close contact with violent and disturbed patients, without

regard to the reaction of these patients on them or their reaction on the disturbed patients. I have interviewed many of this type, and if a lawyer came forward and requested a release for one of them on habeas corpus proceedings, no physician would jeopardize his reputation by testifying that the patient was insane. The conduct of the hospital authorities towards them, in an effort to discipline them, is not entirely praiseworthy, either from a humane aspect or from the standpoint of fair play; but if the hospital authorities had not the means of disciplining them when they are disturbing, it would be impossible to manage them.

The State Board of Insanity has a duty to perform to the mentally ill in its charge. In an effort to safeguard the well-being of the community, the State Board cannot lose sight of this fact. The imbecile does not have good judgment and at times is incapable of self-control, but many imbeciles have excellent insight, and feel deeply the injustice of being classified as insane and kept in intimate association with insane individuals who react on them to disturb and annoy them continually.

I believe that we are all in agreement that defective delinquents should be segregated and cared for in institutions with sufficient custodial equipment. Where we fail to agree is in what department these institutions properly belong. I hope the discussion will be free and open, and result in definite and generally accepted conclusions.

The intent of chapter 595, Acts of 1911, appears to be plain. Sections 1 and 2 provide that the court may commit an offender who is mentally defective to a department for defective delinquents, and that defectives now in custody in different State institutions who conduct themselves indecently and immorally, or otherwise grossly misbehave, if they are not proper subjects for the school for the feeble-minded or for commitment as insane persons, may also be sent by the court to this department. Section 5 further provides that "At the reformatory for women, the Massachusetts reformatory and the state farm there shall be maintained departments to be termed departments for defective delinquents, for the custody of persons committed thereto under this act." "This act shall take effect when the departments named in section five are

ready for occupancy." The departments have not been provided, and if, because of this fact, there is any unusual anxiety on the part of those responsible for providing them, it is not generally known.

The language of the statute is clear, — so clear that there can be no mistake about its meaning or where the law requires that the defective delinquents shall be cared for. Confusion arises from the statutory definition of the insane, and a difference of opinion in regard to which individuals are proper subjects for the hospitals for the mentally ill and the schools for the feeble-minded. A partial census made by an officer of the State Board shows that many prisoners in the State Prison are defective. Dr. Spaulding reports that 40 per cent. of the prostitutes in Sherborn are defective and should be permanently segregated. Dr. Neff finds a psychopathic background in many of his inebriates. I do not understand, however, that these are State hospital cases. The State Board of Insanity is not reaching out to have committed to its charge all the perplexing anti-social individuals at large in the community, or all the problem cases that are now confined in prisons and other places of detention. That would be a retrograde step in classification, and I am sure public sentiment would not support it.

Hon. Frank L. Randall, chairman of the Massachusetts Board of Prison Commissioners: — When I first engaged in prison work I did not know very much about it, and I knew that I did not; and my experience since that time has confirmed my own opinion that we know but little of the care and treatment of delinquents, and particularly of defective delinquents.

I had not long been busy in the care of young men before I took advantage of the opportunity to meet others in the same line, and I heard men of renown and veracity say that in the State Reformatory of New York (they had but one then, at Elmira) 83 per cent. of all of those committed were reformed; and I heard other persons say that the percentage at the reformatory at Concord Junction was exceedingly high. Then I went back and looked over our students, and I made up my mind that it was impossible that we should ever achieve such results with them.

Thereupon I bought a railroad ticket and went to Elmira, and I talked with Mr. Brockway, who had established the reformatory system in this country, and almost for the world, and he told me that he had never authorized any person to put out any such figures as I have just mentioned. He called me "brother," and told me to be of good cheer, and so I did as he told me. I went over to Concord Junction, and Superintendent Scott told me there that he had not authorized anybody to put out any such figures for him. Therefore I interviewed the respected gentlemen who had made those statements, and found that they had got them from somebody else who had reached out into the night winds and gathered them in.

What impressed me so strongly was this: in looking over and becoming acquainted with our population I could see clearly enough that there were not 83 per cent. of them who were capable of being good citizens. I did not then know why, but I made up my mind to that, at least. Thereupon I started in with the doctors. I commenced talking to the doctor who was at the head of the school for the feeble-minded, — the gentleman who gave me a letter to Dr. Walter Fernald when I came to Massachusetts, and told me there was no person who stood higher in his work in all the country, and perhaps in all countries, than Dr. Fernald. Dr. Fernald was very cordial, and told me that an introduction from Dr. Rogers was sufficient because there was no man in all the country who stood higher than Dr. Rogers. Then we had a noted man in charge of the hospital for the insane, and I had the privilege of being with him more or less, so that I feel that they started me in what I thought was the right direction, and I still think so, — that we should find out about the people who are sent to us.

I thought, of course, living up there in what we called the "Northwest," and living all alone and having no professional associations (except perhaps annually), that in other places they were so far ahead of us, and we were so far behind, I could get light by inquiring from other persons, in other States, charged with duties similar to those which I was trying to carry; and so, in order to find out about the situation in other

places, I wrote a letter to all of the wardens in the United States and Canada, and all persons in charge of reformatories, and all persons in charge of schools for juveniles, and asked this question: "To what extent do you recognize mental inadequacy and constitutional inferiority among the persons in your charge?" Just at that time the term "constitutional inferiority" was more popular than they tell me it is now. Of course, I had taken what had been given me. The estimates were various and almost amusing. Among prisons for adults they range from 3 persons out of 240 in Wyoming to 10 per cent. in Nebraska and Philadelphia; 20 per cent. in Rhode Island, 25 per cent. in Vermont, 30 per cent. in Indiana, 30 to 40 per cent. in Wisconsin, fully 50 per cent. in Kansas, 60 per cent. in West Virginia, and a still higher percentage of prisoners lacking in energy, mentally or physically, in one Michigan prison. Two wardens said they could not answer the question. I think those two told the truth, — Major McClaughry, then dean of the American Wardens, in charge of the Federal Prison at Leavenworth, Kans., and Warden Wood, the genial gentleman in charge of the State Prison of Virginia.

From the State reformatories the estimates ranged from 25 to 40 per cent. The State reformatories had a parole system. The parole system enjoins a knowledge of the inmates; therefore, you see, they were beginning to get closer. Being unable to report more exactly myself, I concurred in the estimate, — 25 to 40 per cent.

From the New York Reformatory for Women at Bedford we had the following: "Realizing that a large percentage are subnormal, July 1, 1911, we employed a trained psychologist, who will make it a year's study."

From the juvenile institutions the returns were neither more hopeful nor more satisfying, and many institutions of that class seemed to have no special facilities for caring for weaklings, and depended upon a relaxation of the discipline in their behalf. A study of 200 in the Boys' Industrial School in Kansas disclosed that 174 were mentally dull, markedly defective or two or more years behind their proper place in school. I do not mean that that was a fact; I mean that it was the report.

In the Industrial School of New Hampshire about 75 per

cent. were reported to be four or five years below their normal grade in school.

Other letters said "probably 25 per cent. at least;" "one-third;" "50 per cent.;" "to a very large extent," etc. The Idaho Industrial Training School reported "a very small per cent.; I think not above 5 per cent.;" the Georgia State Reformatory reported that "the discipline has to be based on the fact that 75 per cent. of inmates are mental defectives and 99 per cent. are moral defectives." The Girls' Industrial Home of Ohio said: "Fully nine-tenths are subnormal mentally, and a large per cent. physically weak or crippled." From the Iowa Industrial School for Girls came the following: "There is a certain inferiority, either mental or constitutional inadequacy, in each and every one. In the majority of cases it is a weakness; that is, they are easily influenced, therefore easily led astray."

It seems fair and right to allow for a difference among the writers as to the full import of the question to which they have responded, but that may not entirely account for the considerable difference in estimates.

I think a fair conclusion is that the persons who wrote the answers did not know what to say, because they had not the information; but they made estimates and those estimates indicated that there was a great deal of mental inadequacy among their charges, but how much they did not know, and how serious it was they did not know, nor how sure it was to frustrate the purposes of their institutions.

While the incompetents remain with the normal persons in labor, in school and in recreation, the progress of the bright is certain to be retarded by the association, while the outlook for the dull is not improved. This mingling and attempted classification of unequal units seems to be the rule almost everywhere, with consequent lowering of efficiency and tone to the basis of the inferior.

In the reformatory at Concord Junction, to which I have referred before, the physician has made a very careful study, and has really originated what may be called a new classification, and is here to speak of it. I invite your most earnest attention to it, and am glad to have him say this morning that,

without the interviews that are held, — extensive interviews, — with the inmate as he comes, and then a verification of the truth, or the establishment of the inaccuracy of what he says, — without that work the physician at the institution would be unable to do the work as thoroughly as it should be done. The institution is supplied with that information, and the doctor has occupied a position of great advantage in doing his work. He is here to-day to present it.

I want to change this subject, just because I want to say one thing. The propagation of another generation of defectives has been attempted to be done away with by eugenic laws regarding marriage, and some wholesale, sweeping suggestions have been made and some laws passed. In all things we must be practical, and to accomplish large things I think we must commence in the smaller things and test out. It is not often that I get an original idea, and so I would like to tell of it when I do, and this is one. When persons apply to the courts for divorce, as so many do, the courts should have no authority to grant a decree which would permit either party to remarry, unless at the time of the hearing, or at some subsequent time, which could be properly fixed, the person should appear and establish the fact that he or she is a suitable person to remarry and to have children.

Mr. John Koren, United States Commissioner to the International Prison Congress: — I am quite aware that I am not the plum of the pudding, so it is proper that I should come fairly early in the game. Perhaps I can enlighten Mr. Randall in regard to those remarkable statistics which originated about Elmira. Eighty-three per cent. of reform does not include cases for one year only, but cases over a long period of time, and the man who manufactured those figures told me how he had brought it about. He said that he concluded that all persons who had died should be considered reformed, and he added them in and then got the percentage. That is an actual fact. I am sorry to cast discredit on statistics, as that happens to be my profession.

Mr. Chairman, instead of trying to add anything special to this discussion, I want to ask a few questions, and perhaps if I am wrong Judge Bolster will set me right.

It has occurred to me that one of the chief difficulties with which we are confronted in dealing with defective delinquents is the lack of adequate law. I do not mean law providing for institutions to which such persons can be committed, but adequate recognition of this particular class in law, also in criminal law. I cannot see that at the present time the district attorneys and the judges are sufficiently guided by law before them in the adequate disposition of this very special class. Is it therefore not necessary that we to that extent recast the law, or add to our law, so that due recognition may be given to defective delinquents? Isn't it ordinarily true that the law makes a distinction between the insane (I mean criminal law) and ordinary criminal, and that provision is made accordingly? These people, being neither exactly one nor the other, require very special definition and very special recognition, and that leads to another suggestion.

If the law took a larger cognizance of this group, wouldn't it necessarily lead to a further step, which I think we all desire, namely, that of extra service in connection with the courts, so that we might know in advance, not after the question comes of committing them to institutions, just what sort of people they are? I know we are beginning in a small way, especially in the lower courts, to do that kind of work; still, there remain the Superior Court cases, to which we are not giving a great deal of attention. I merely offer these suggestions, which seem to me rather important if we are going to make real headway. My own opinion in regard to what ought to be done with them can be stated in these words: —

We should carry out the law already on the statute books of the Commonwealth stating that these people must be provided for in special institutions, and that they cannot be placed in any existing institution with advantage to themselves or in justice to them or to us, if we want to deal fairly with them.

Prof. Robert M. Yerkes, psychologist, psychopathic department, Boston State Hospital: — I wish, first of all, to subscribe most heartily to the opinions just expressed by Mr. Koren.

There are two questions suggested by the topic: what shall we do *with* the defective delinquent, and what shall we do *for* him.

The first, I think, is much easier to answer than the second; but it is the second that I am primarily interested in because, as psychologist, the study of the individual is my chief concern.

I am firmly convinced that because of the risk of social infection delinquents should be segregated, and that that segregation should be so effected that the individual should be very early discovered, even before the school age in many cases, and certainly during school age, if delinquency then exists. This would obviously involve school surveys; and our study of deficiency in the schools should particularly take account of delinquency.

As psychologist, my interest leads me to emphasize the importance of methods. A few months ago, in taking part in a discussion on methods of psychological examination, I saw reason to criticize the position taken by another gentleman, and in reply he said that the method being used was good enough for him, or "good enough for us," as he put it. Now that is not an uncommon attitude in practical affairs. We do, of course, want to achieve certain practical results; but I gather from the attitude of many of you that no method is too good for us, and that only the best available or the best obtainable method is good enough for us and for our Commonwealth.

I hope that in connection with this problem — and certainly there is no problem which is more difficult and baffling than that presented by defective delinquents — we shall have the foresight and wisdom to develop methods of studying these individuals rather than simply plunging ahead with the task of dealing with them. We can, of course, easily enough put them out of the way. The provision of certain types of institutions would be a very simple solution of our problem, but scarcely a humane solution from the standpoint of the individual. It seems to me clear enough that psychologists are not prepared to present satisfactory methods, but I have no special apology for psychology at this moment because it seems equally clear that we are in a position to do something towards developing adequate methods. That is my chief interest.

It is not the accumulating of facts which may be of ultimate importance to us, but rather the development of methods of

inquiry — methods of studying the individual socially and mentally — which will yield the materials that may later direct us more intelligently in the treatment of these individuals. No simple examination is adequate. The individual is an almost hopelessly complex object, and whoever attempts to recommend treatment for an individual must know that object from various points of view. We must avoid undue specialization and undue division of labor in connection with such problems, and attempt to bring together into one composite picture the varied information that is now gathered by social workers, by psychologists, by physicians, and, of course, not least important, by the person of affairs who is interested in the relations of the individual to the State.

I lay all emphasis, then, upon preparing ourselves to deal intelligently with these human problems rather than merely getting them out of our way so that they shall not harm those who are relatively normal.

Mr. Herbert C. Parsons, trustee, Wrentham State School: — I was rather expecting an introduction, if I were called into this discussion, as connected with the probation service of the Commonwealth; and the little thought I am contributing is what one may observe in the courts rather than an observation of a trustee of a feeble-minded school.

This morning, in a small court in the western part of the Commonwealth, a judge will be confronted with a serious problem. A man will be brought before him who was apprehended yesterday in a 5-and-10-cent store. When he entered the store the sleuth, who has a view to the unlawful appropriation of articles from the counters, discovered that something was unusual in his appearance, and gave a watchful eye to his conduct in the store. He first went to the counter where small drills were sold. He appropriated a number of these, for which he probably had no use at all, and tucked them away in his pocket. From there he went to the shoe blacking counter and loaded himself up with an abnormal quantity of shoe polish. From there he went with commendable desire to the soap counter and appropriated a number of cakes of toilet soap, which he also tucked away in his clothing. And then, apparently wanting to preserve the equality of things, he returned

to the shoe blacking counter and took on more of those articles, and disposed of them likewise, at which point the sleuth, with great shrewdness, came to the conclusion that there was some disorder connected with the man and took him in charge. And this man, after a night's confinement in the local lockup, will be presented to the court for determination as to how he shall be disposed of; and I can fancy the serious problem the judge has on his hands as he undertakes to dispose of this person who is committed to his care. Whether, according to the old standards of such communities as this court stands for and stands in, there shall be an effort on the part of the Commonwealth to get even in terms of correction with terms of soap, shoe polish and useless tools; or whether there shall be some effort to determine whether there is a mental or moral accountability in the man; or whether, as in all probability will happen, the probation service will be resorted to as an easy escape from all other problems, I can hardly guess.

Now the problem that I have detailed, which was presented to the court in this town this morning, is a comparatively simple one. What we do see in the courts of the Commonwealth is a very serious difficulty in the determination of mental accountability for the acts that caused the person to be brought there. No one can come even slightly within the range of observation of what the courts are having to deal with without reaching the conclusion that the problem which is under discussion here this morning is one of the most pressing and most serious of any of our public questions.

What I have to say is not from the expert standpoint, because I would not at all attempt to qualify in such a presence as this, but from what may be called the private citizen or legislative standpoint. We have a demonstration, I think, in the Commonwealth of the readiness of the public mind of the people of Massachusetts to grasp situations which are at all similar to the one we are dealing with here, and to provide, as is pointed out, necessary means for dealing with the problem and with whatever classes of cases are involved in it. Many who, under the leadership of Dr. Fernald, have for years carried on the presentation to the people of the Commonwealth of the need of caring for the feeble-minded, are having a splendid

satisfaction in the demonstration of the readiness of the people of the State to provide for the care and training of the mentally deficient. It is shown in the readiness with which the institutions are provided, and by the recent addition of a third school for the feeble-minded in this State.

We have a demonstration in a law which the chairman has read this morning of the readiness of the Commonwealth to deal with this problem of the right placing of the people who are recognized in the courts, and in a degree by the courts, as being there because of a mental deficiency.

Now the one thing I desire to say is not by any means all that I should like to say if I were not limited to a few minutes; the one thing I want to emphasize is the great necessity of a strong fortification of the courts themselves for dealing with this question. We have in the municipal court in Boston a real pioneer undertaking in the use of one of the probation officers there as a mental examiner. The chief justice, who has modestly declined to join in this discussion this morning, has struck out pioneer ground, which is an example to the entire judiciary of the State, in making a provision within his own court for the examination of such cases as come under suspicion of the judge who has the disposition of the case, — in providing a medical examiner and mental examiner in order that there may be some sort of mental determination.

The one thing, it seems to me, which it is necessary for us to emphasize, in view of the fact that the Commonwealth has already made at least a tentative provision for the care of these cases, is to be sure that we do not continue through the courts this foolish and tremendously costly process of sending to correctional institutions persons whose mental condition absolves them from moral accountability in the courts of the Commonwealth. There is nothing more foolish in that entire process than sending to penal institutions in the State, in frequently recurring terms, a vast number of persons whose accountability is very low indeed, if there is any accountability there at all, because of mental defect.

The greatest emphasis, it seems to me, at the present time needs to be put upon the equipment of the courts with the means to discover what the accountability of the persons going

through their hands is; and I am very sure the public sentiment of the State is fully ready for the equipment of the courts in that way, and, largely because of the tremendous cost which it is to the people of the Commonwealth to maintain these cases in penal institutions, to see that this process is thoroughly gone into, and to arrive at least at an approximate conclusion as to the responsibility of persons who are brought before the courts on criminal charges.

Beyond that, I am sure, lies already the promise that there shall be institutions where persons of this character shall be cared for; and let me say that of all institutions where they ought not to go, the schools for the feeble-minded are the ones where they should not be sent. The protests of those who are connected with the feeble-minded schools, against the work of those institutions being hampered and injured and prevented from its best results by the presence of these defectives, ought to be heard, because it is a fact that can easily be demonstrated that their presence in the schools is disturbing and hampering, and very largely defeating the objects for which the Commonwealth has provided these schools for the feeble-minded. Let me say finally that they are not wanted in our probation courts. Our probation officers already assume a tremendous task in this Commonwealth in caring for 27,000 cases a year, and they should not have put upon them the additional burden of caring for those who are clearly mental defectives.

These are some of the specifications of the problem which I believe the Commonwealth is fully ready to deal with when legislation, through the guidance of such people as are gathered here this morning, shall provide a reasonable, sensible and scientific way of dealing with them.

Dr. Guy G. Fernald, resident physician, Massachusetts Reformatory, Concord: — Whatever a prison physician and laboratory worker may say to an audience of administrative experts on the subject of this session should attempt to contribute to the bases of administrative opinion rather than attempt to suggest administrative methods.

The term "defective delinquent," like the term "insane," has a social significance as well as a psychiatrical or laboratory

significance. To the layman each is inclusive; but to the psychiatrist each is generic also. Both are good terms when used with discrimination. In the following classification the members of the defective delinquent class are scattered among the various groups of the segregable.

It will be much better both for prisoners and all concerned in their training, as well as for the community, when they are classified before sentence is passed. In all Chicago criminal courts those accused are examined by competent medical examiners and their assistants, and the courts may be furnished with an expert's findings and classification before sentence is imposed. Similarly in the Boston Municipal Court there is a regularly appointed medical expert who furnishes the courts, probation officers and prison officials with an alienist's classification of prisoners. Other cities are considering the taking of this or some similar step.

It is now an undisputed principle, having been repeatedly enunciated by authoritative writers in the "Journal of Criminal Law and Criminology," that when prisoners are dealt with by the courts and prison officials on the basis of their mental condition as determined by competent examiners, rather than in accordance with the kind and degree of their unlawful acts, a more rapid diminution of criminality may be expected. In other words, the administration of remedial measures for offenders should consider the offender rather than the offence. The next question logically is, Why are not prisoners classified earlier? Because the physical equipment for so doing has not been called into existence by public demand.

The immediate advantage of classification to prisoners at the reformatory consists largely in the broadened basis for judgment afforded the Board of Parole and Pardons and the administration officers in the increased provision for the proper training of those of limited responsibility and the adaptation of discipline to defective individuals, some of whom cannot understand the rules they are expected to observe. It should be noted, moreover, that classification on paper must always precede the practical application of any such system of penal administration as we should seek to realize. Without an architectural plan there is no hope of completeness of structure.

Cross-reference Tabulation of Psychopathic Diagnoses, Massachusetts Reformatory, 1914–15.

Intramural Descriptive Designations.	Grades of Mental Efficiency.			Totals.	
	Normal.	Subnormal.	Segregable.		
Competent: —					
Accidental offender,	33	1	–	34	
Responsible offender,	168	–	–	168	
Alcoholic,	14	–	–	14	216
Deviate: —					
Recidivist,	–	48	20	68	
Alcoholic degenerate,	–	55	6	61	
Congenital syphilitic,	–	10	6	16	
Epileptic,	–	9	4	13	
Sex pervert,	–	3	2	5	
Insane,	–	–	4	4	167
Deficient: —					
Moron,	–	93	–	93	
Feeble-minded,	–	–	42	42	
Imbecile,	–	–	1	1	136
Psychopath,	19	56	13		88
Drug habitué,	5	2	1		8
Unclassified,	34	8	–		42
Totals,	273	285	99		657
Per cent.,	42	43	15		–

Current classifications of prisoners and other public institution groups take cognizance very properly of such gross and obviously differentiating characters as sex, age, length of sentence and kind of offence, — factors the recognition of which is essential to a working organization within the institution to satisfy the immediate demands of industrial, social and educational adjustment. But what is sought by the sociological students, institution officials, philanthropic agencies and legislators is a classification into essential groups such that the individual prisoner's needs may be effectively and economically met. Classifications, then, should be such as will distinguish

clearly the kind of individual, his degree and kind of mental aberration or peculiarity, if any there be, and enable the adaptation of teaching methods, of custodial care and of educational uplift to the individual and to the definite group which he represents.

A classification should be (1) easily understood, *i.e.*, workable, (2) informing and (3) definitive.

To be sufficiently informing and yet workable there should be revealed at least the kind of mentality and the degree of efficiency. In a simple classification the degree of efficiency may be uniformly expressed for each prisoner by classifying him in any one of two, three, four or more categories, *e.g.*, as normal and subnormal, or normal, subnormal and segregable, terms which represent definite degrees of mental efficiency separated by definite lines of demarcation. Besides this quantitative classification there should be a qualitative designation for each case as a cross-reference. The numbers of these descriptive designations must be much larger, depending on the number of recognizable varieties of mentality encountered. And there is also danger of so multiplying the designations of "kind" or variety of mental departure as to render the classification cumbersome. Some essential classes are epileptic, insane, congenital syphilitic, recidivist, alcoholic, constitutional, psychopath, moron, drug habitué, etc.

By whatever titles these entities be called or designated, the province of each is distinct and definite, *e.g.*, to the medical examiner the limit of the group "epileptic" is nowhere coextensive with that called "insane," and the term "moron" is applied only to the purely intellectual defective. The recidivist is the habitual offender, often with anti-social tendencies and character defects, who repeats his errors of conduct possibly because of an inherited tendency or an acquired twist of purview, or some mental conflict which may defeat his ability to profit by experience. He may talk glibly in street-corner slang and sophistries, and show good ability in some lines, but his moral obliquity seems beyond his control. Many recidivists are incorrigible and prompt and persistent liars. The moron is the high-grade feeble-minded individual with or without anti-social tendencies. The accidental offender has no intelligence

defect. He may lack stability of character, is often indolent and disregardful of the consequences of his acts and of the rights of others. His reason or ambition or pride may be appealed to, however, and his self-control regained. The constitutional psychopath may show good ability along some lines, but he is unstable, unreliable, erratic, emotionally labile and in crises uncontrolled. A man's mental faculties taken singly may not be subnormal; but his life history may be one of failure, nevertheless, because of his inability to co-ordinate those faculties. Such a man is a failure as a social unit, and it is seldom indeed that one can be credited with a normal degree of efficiency.

Surveys of simple classifications with cross-references like those cited show, *e.g.*, the number of alcoholics whose mental efficiency may be graded as normal and the number of alcoholics whose mentality has retrograded to the extent of their becoming subnormal, or the number of feeble-minded of so low a grade of mentality that they require special training. Such classifications based on recognized mental conditions and revealing actual individual needs constitute the best available criteria for legislators and institution builders and administrators. Knowing the content of groups of prisoners in size, degree of mental efficiency and kind of mental departure, one may plan the size and kind of schoolrooms, the kind of school teachers, the height of brick walls, and may intelligently adjust the social, disciplinary and educational requirements of each group.

No one examination will give an adequate basis for a judgment on the kind and degree of a prisoner's mental efficiency. Something more than a cross-section view is needed, even though that cross-section view include a glance at all of the very many mental factors essential to be studied. It would not be enough to see the complicated mental mechanisms at work for an hour, even if that were possible. A knowledge of the patient's anamnesis is essential, and this may be obtained by well-trained, conscientious field workers. Without a full knowledge of the life history, however, no true or adequate conception worthy of serving as a guide to the alienist's judgment is possible. The basis of the medical psychologist's findings must be his full, clear, clinical case records.

Tests of intelligence are essential, but their value has been probably overemphasized by students, perhaps because they are so obvious and easily applied. They have their place in the examiner's armamentarium, but can never give essential information outside their province, which is very definite and by no means inclusive. Tests adapted to the intelligence of school children are not adapted to differentiate reformatory inmates in kind or degree of intelligence. The advance in intellectual development from one year to the next in mental age diminishes as the age increases, and fifteen years is regarded as that of the normal adult mental level. The intelligence of most prisoners is above that of the intellectual level of nine, and the difference between the intellectual level of thirteen and fourteen, or fourteen and fifteen, is very small. Tests devised to differentiate children of different degrees of intelligence are not adapted to reveal these small differences; and, furthermore, tests chosen for school children are not well adapted to apply to adults in years, even though they be of a low order of intelligence.

In spite of every effort to be exact and definite in forming concepts of mental groups, the fact will constantly force itself on the examiner's attention that there are border-line cases which present characteristics of more than one group. These require intensive study and repeated observations. For instance, a recidivist may have a grave judgment defect, and in crises act foolishly or not at all, or an alcoholic degenerate may be a repeated offender with the character defects of the recidivist, and he may be, moreover, an epileptic; but the fact that certain observed cases are confusing is no reason why mental group entities should not be clear and distinct.

A brief outline of the machinery of a system of inmate classification may be of interest. This might consist of the laboratory case records, the essential features of which are, for each case, (1) the anamnesis, (2) the clinical notes, and (3) the diagnosis sheets or cards to which are added surveys, card indices and other laboratory accessories. The anamnesis may be a large sheet or calendar on which are systematically assembled the vital statistics of the case and of his ascendants and siblings, the childhood history, family life and training,

school history, religious training, manner of leaving school, attitude toward family, friends, employers and teachers, special tendencies, early and late, habits of diligence or shiftlessness, recreations, escapades, excesses, offences, later failures, successes, arrests, incarcerations and his reactions thereto. To these are added the institution records of industrial training, school progress and conduct marks. The clinical notes bear the records of the laboratory test scores and the content of the examiner's interviews. All opinions and findings are reserved, however, for the diagnosis sheets, which may be filed on cards of various significant colors and employ for identification a code intelligible only to the elect.

The collection of the above-mentioned material from the prisoner, from his home, employer and friends, and from the court and police and institution records must be intrusted to skilled officers and field investigators. There is a real advantage in enlisting the services of those specially skilled in this kind of interviewing. The interpretation of the assembled material can hardly be delegated, however. The examiner should be specially fitted by training, experience and temperament for the delicate task of interpreting the assembled results from all the available sources of information.

The progress and future development of penology is directly dependent upon the evolution of classification of offenders. With only the definite knowledge of the needs of certain mental groups now available, it is clear that the penal institutions of the future will show radical departures in arrangement and adaptation from those we now have. Now that classification on the basis of mentality opens another avenue of advancement, certain features of our present procedure seem very crude and illogical; *e.g.*, it is illogical to impose a definite sentence upon any one incompetent to support himself honestly. What such a one needs is treatment, not punishment. And it is illogical to limit his incarceration when he needs a long course of specially adapted training similar to that of the feeble-minded, the limit of which can be determined only by the slow progress he makes. He should be committed, not sentenced. To quote from our pamphlet published in 1912: "The responsibility of defective delinquents is limited. Therefore

they should be committed to a suitable institution instead of being sentenced for punishment with fully equipped misdemeanants." [1] The justices of our courts deplore the necessity of sending these deficients to a penal institution; but since there is no other place, inadequately equipped offenders must be sent there or soon be turned loose again on the community. It is not that the producers of the community have not been willing to care for the parasites in a better way, but rather that no better way was available. Now as the members of the mental groups are pointed out, and the essential groups themselves become definitely limited, the means of supplying the needs of those groups may safely be left to those handling administrative problems.

Conclusions. — 1. The classification of public institution inmates should be extended beyond the obvious divisions according to age, sex, reason of incarceration, etc., to include designations of variety and degree of mental departure, since the individual, not his offence, is to be treated.

2. The advantages of such a classification are (1) better intramural adjustment and teaching and (2) a broader basis of judgment in the study of imminent administrative problems by boards of control, by legislators and by institution builders.

3. There are certain classes of mental deviates and deficients of limited responsibility who should not be sentenced with fully responsible offenders, but who should be committed to a specially adapted institution as are the insane and feeble-minded.

4. A medical examiner's survey of the full clinical case records containing the assembled significant factors of the life history, supplemented by repeated examinations of the mentality covering the whole field of mental activity, is essential to a fair classification.

E. E. Southard, M.D., director of the Psychopathic Hospital: — Psychopathic Hospital out-patient cases are often cases of potential delinquents, many being referred to us from schools, courts and other institutions. I can go to hardly any city or town in the Commonwealth without hearing of some one who

[1] "The Defective Delinquent Class: Differentiating Tests." American Journal of Insanity, Vol. LXVIII., No. 4, April, 1912.

has been at the Psychopathic Hospital within its three years of establishment.

This problem of the defective delinquent, so called, has appealed to me as one of the six or seven big problems we are facing. The Board of Insanity is trying to effect district outpatient service, to lay a foundation for district social service, to attack the syphilis problem, to build a new hospital in the metropolitan district, and a new institution for the feeble-minded. But of all these problems, and a number of others that we are confronted with as scientists, that of the defective delinquent is surely one of the dominant ones. Interestingly enough there has been a spirit of co-operation between the Prison Commission and the Board of Insanity. As far back as December last the two Boards made a joint resolution, as a result of which the work of Stearns and Rossy has been done at Bridgewater and at the State Prison, the figures of which appear in Bulletins of the State Board of Insanity. These figures show, of course, as has always been shown, a good number of persons who would grade feeble-minded by available tests. The work did not show any large number of cases that obviously should be immediately transferred either to institutions for the insane, feeble-minded or for the epileptic. They contributed to character knowledge and anthropological knowledge; but as far as demonstrating that all criminals are feeble-minded, which is the modern cry, or that all criminals are epileptic, which is Lombroso's cry, or that they are all insane, as a good many people on the street and social workers often think, who say to me that crime is a disease, — our workers did not prove this, nor would Dr. Guy Fernald state that he had proved it.

The anthropological, or even the medical and psychiatric classifications, however, are not going to be convincing to the justices that I have met, and these justices seem to me to be men of light and learning. They, in fact, represent the chrysalis of old social service of several centuries ago; the law has a history of eight hundred years, and what is law to-day was social service then. These discussions are but growing pains on the part of the public, which is beginning to take the measure of social service. Our classifications, however fundamental,

will not decide whether a patient is to go to one place or another, because all practical lines of institutional care run at exactly right angles to the lines that divide insanity from feeble-mindedness, feeble-mindedness from epilepsy, etc. Thus there are some insane that belong in institutions and some that do not; some feeble-minded that belong in institutions and some that do not; some epileptic that belong in institutions and some that do not.

Accordingly, each classification divides into two, and whatever we do with these classifications we shall not prove that, inasmuch as three-fifths of the criminals are feeble-minded, or one-half of them feeble-minded, therefore they shall go forthwith from the State Prison to Waverley. It is not even necessary that they should to go Waverley. Perhaps they should go into the community. It is a practical matter.

I have been much interested in following Dr. Spaulding's work at the Sherborn institution. She is on the high seas at present (and I hope will not be torpedoed, because we need a great many more of her sort). With the co-operation of Dr. Sullivan, and of course with the support on the sociological and economic sides from Mrs. Hodder, she has investigated some 500 cases with available mental tests, and I have spent a good number of hours going over these data with her. Now we found 88 cases of the 500 that were absolutely normal in all respects; that is, they were neither feeble-minded, epileptic or syphilitic, nor were they victims of any somatic disorder or of poor physique, nor did they show any peculiarities of psychopathic trend. There were 88 cases like all of us in this room, as far as these matters are concerned. These 88 cases are obviously cases which you can reform or you cannot reform. I think some are environmental cases that could be reformed some day. I think some are character anomalies that cannot be reformed except by working with the germ cell, which is beyond the range of public service at the present time. Some of them are mixtures, — both character anomalies and defective germ cells. But surely no board of insanity nor any board is going to lay hold voluntarily of these 88 cases and say, "Let them go to institutions for the feeble-minded, epileptic or for the insane."

Where should they go? Well, the ones you can reform should go into the community, and the others, with difficult character anomalies, should stay where they are. They make good custodial cases.

From 300 to 500 of the list were feeble-minded to tests, some of them markedly so, some of them less so. But of all these cases none appealed to Mrs. Hodder or to me, as heads of institutions who might consider the thing from an administrative standpoint, to be properly a subject for an institution for the insane, feeble-minded or epileptic. Although they happened to be feeble-minded they were essentially criminal; and they either belonged where they were or they belonged in the community. They are more or less subject to reform, although you cannot put in nerve cells by any method that Alexis Carrel would adopt for the liver or the kidney, — at least in this stage of science. At any rate, they do not seem to be cases that should be transferred.

I should say a word about the group of syphilitics. There was a great number of syphilitic cases, and a great many syphilitics were mental cases. Every syphilitic case showing mental symptoms deserves a very careful examination and treatment.

I came out of the Psychopathic Hospital yesterday and got on a street car — I won't say of which line. The conductor said, "Hello, Doctor." Not knowing him from the other 2,000 admissions last year, I talked with him a bit. He said, "I was treated successfully by so many injections of 6 0 6. I went to a certain physician of standing and he said I was not ready for treatment. Finally I thought I had better go to the Psychopathic, and there I got cured."

Of course, that may be an exception and it may not. Every syphilitic case demands examination and treatment, and every institution that harbors any number of these requires a medical adjunct for venereal disease and treatment. It is not a matter for the Board of Insanity; perhaps it is a matter for the Board of Charity or the public health commission. As you know, the advanced stand which the public health commissioner is now taking is that the State should buy salvarsan or other drugs with which to cure syphilis; and we most heartily applaud him

in that advanced step, even though we do not feel that public service will practically accomplish it during the next few years.

We got out of the whole group some 68 cases of a psychopathic nature, and it was our desire to learn how many of these cases really belonged elsewhere; and Mrs. Hodder and I have gone over this matter from what we conceived to be a practical standpoint, basing our conclusions upon these fundamental matters of classification to which Dr. Fernald has referred. We have decided that some 35 of these cases, out of 500 random, unselected cases, belong in institutions for the insane; some had been in such institutions; some were cases on the way; and other cases were, in our opinion, bound to arrive there some day. They really should receive proper psychopathic classification and early treatment at this time too. But the other half of the psychopathic cases did not seem to us to be essentially psychopathic from the standpoint of criminality. They seemed to be cases which might stay where they are.

As we have eight receiving institutions we could clear out these cases which belong to the State Board of Insanity, if Mrs. Hodder and I are to be trusted, by sending four or five of them to each institution for the insane. In other words, the group of difficult defective delinquents is a much smaller group than any one has insisted. I think it has been understood that Dr. Bullard, in one of his presentations before a certain society, stated that the group is a very small one — the really difficult group.

I think when we come to analyze in this way a large amount of criminological material on the female side of the world, which is granted by all men to be more difficult than the male side (we always hear about the female defective delinquents as the great "instigators" and the great "pathological liars," and "odd sticks" which make it so hard for the administrative heads), and get down to work and found our work on individual cases, — well, it is "a far cry and little wool" when it comes to the cases that actually need to be transferred.

I think we should utilize existing laws, as Commissioner Koren has stated, to have the justices use medical body guards, as it were, — even bring them on the bench as Dr. Healy has

been on the bench and sat opposite the judge in Chicago. Settle these questions at the outset, and then I think you will find that existing institutions are almost sufficient. To be sure, in every reformatory like Mrs. Hodder's there may be at any time 25 cases of a psychopathic nature, and several more with no decision in this regard; and accordingly a little psychopathic pavilion or ward in each such institution might be of importance. But no person like Dr. Fernald, no highly specialized tool, and no psychiatrist, who is going to get a very intimate knowledge of people, can manage many more than 25 cases at a time. Accordingly a little unit of 25 beds, such as has been proposed and started at Bedford Hills at the present time, might be advocated as a practical measure at these reformatories.

The practical problem is much smaller than any one has heretofore hinted. It is all out of doors, — an immense problem from an anthropological or psychological standpoint, or from the standpoint of the improvement of society; but from the standpoint of public service at the present time, with the present available laws, it is a much smaller problem than any one has believed.

Mr. Walter Rapp, trustee, Medfield State Hospital: — Dr. Southard, can you give a layman an answer in plain Anglo-Saxon what you consider is meant by a "defective delinquent"?

Dr. Southard: — Anglo-Saxon doesn't seem to be as effective to-day as German or Greek. But the term "defective delinquent" to my mind is simply a practical caption like the name John Smith. Here are the Smiths, and here is one named John; here are the delinquents, and some of them are defective. Now the term "defective" as used by the Census of 1905 involved many things: physical defectives, such as victims of Bright's disease, cancer, etc., and lame people; and social defectives, which include neglected children, paupers, prisoners, insane, feeble-minded, etc. That term "defective" as used officially by the State of Massachusetts has a very wide distinction practically; by a good many workers it is used to mean feeble-minded. But then we dodge from one meaning to another in our discussions to an alarming and terrible degree, so that I should say a defective delinquent may be one of several

things, — he may be feeble-minded, he may be epileptic, he may be psychopathic, or he may be merely social.

Dr. Walter E. Fernald: — It is a very great pleasure to me to have listened to this discussion from so many points of view. I was connected with the commission which invented that much-abused term "defective delinquent," and I feel much pleased that the expression has emerged from this discussion so little battered.

As a matter of fact, the term "defective delinquent" was suggested as a tentative term to designate a class of cases whose exact mental condition is now a matter of doubt. The addresses this morning from the Prison Commission, from Sherborn and other institutions corroborate to a remarkable extent the theory that among people classified as criminals there is a very large amount of unclassified and uncharted types and degrees of undoubted irresponsibility. Many of these cases cannot be classified into any of the standard types of mental defect or mental disease.

Our commission, four years ago, formulated a law which was drawn up by the late Judge Baker, providing for the legal recognition and commitment of these irresponsible individuals, who are designated as defective delinquents. It was well understood that this term was a rather loose one, but that it included those individuals regarded as irresponsible by every one dealing with the prison population. The purpose of the law was to provide that these defective people should not be discharged at the end of their sentences, to go out into the community, to commit other crimes and to reproduce their own kind. It was intended that the law should provide for a tentative grouping of the defectives who were in the prisons at that time, — who were already in custody, — with a view to determining their fitness for discharge, and with a view to providing for the detention of those who ought not to be discharged. The commission felt that the rights of the non-defective criminals would be enormously helped by a separation of the defectives from the reformable and responsible people who are found in the prison population.

It is my privilege to do a good deal of lecturing among men's clubs and women's clubs, and various other social or-

ganizations, and I can testify to the popular interest and belief in the importance of this principle of separating the defective criminal from the normal criminal. It is remarkable how simple and obvious this plan seems to the ordinary intelligent man and woman.

We have had on our statute books for four years a law which provides for the recognition, commitment and detention of these defective delinquents. This law went through the Legislature practically without a dissenting vote; but no attempt has been made to enforce it, and so far as I know this is the first public meeting at which all phases of this problem have been discussed.

These turbulent, troublesome, sly, cunning, crafty, malicious people, many of whom have had a long career of criminality, are not wanted at the schools for the feeble-minded, the hospitals for the insane, at Sherborn or at Lancaster. The fact that these people are foreign bodies in all of these institutions is a striking proof that they do constitute a class which should be studied by themselves. The purpose of the law was to make a temporary and tentative classification, largely for the purpose of further scientific study.

It was the idea of the commission that the sort of intensive case study outlined by Dr. Southard and Professor Yerkes would eventually result in the reclassification of many of these individuals into groups which do not differ from groups now found in the various existing institutions.

One fact should be remembered in thinking of permanent plans for the care of these defective delinquents. This class would include a certain number of very desperate and dangerous individuals. The altruistic methods and atmosphere of the modern hospital for the insane or school for the feeble-minded are entirely unappreciated by these people. The defective delinquent abuses all of the privileges of this type of institution. My own knowledge of these people leads me to believe that many of them will require very definite provision in the way of preventing escape and of curbing the turbulent and violent tendencies of these desperate people. It is my impression that the number of defective delinquents is much larger than Dr. Southard has suggested.

Dr. Southard: — My figures were for Sherborn only.

Dr. Fernald: — The problem is a very difficult one, and will tax our resources in every direction if we are to solve it.

Now the present question is whether we shall apply this present law providing for the reclassification of the defectives already in the prisons, or whether that law shall be thrown overboard and an attempt made to get new legislation. At the time this law was passed there was no precedent for a law of this sort, and, indeed, at the present time, so far as I know, there is no legislation in any other State or in any other country providing for the special recognition and special care of the class of defective delinquents. There would be some risk connected with resubmitting this question to the Legislature until the plan which has been provided has been given a trial. It seems to me that a year or two of trial of this plan would give us data for going back to the Legislature in a very strong position, and that the experience and the facts obtained by this experiment would form a basis for permanent action.

I have no doubt that eventually there will be a special institution for this class. We have no exact knowledge as to the total number to be provided for. We have no real knowledge as to the necessary accommodations, appliances and arrangement of the institution. We shall not know these facts until we have segregated these people, counted them, studied and analyzed them; and we are likely to make serious mistakes if we legislate very definitely without having a precise knowledge of just what the problem is.

Mr. Ellerton James, secretary of trustees, Wrentham State School: — I do not understand why no steps have been taken by the Prison Commission to carry out that law or make some place for the reception of these defective delinquents. As I understand it, the law stated that there should be certain things provided at certain places, and it has not been done. Is that a lack of desire on the part of the Prison Commission or a lack of finances?

Mr. Randall: — The law referred to by Mr. James, as I understand, is chapter 595 of the Acts of 1911, an act which was passed after the receipt of a report by a commission charged with the duty of making inquiry as to defective de-

linquents. No appropriation was made to carry the act into effect.

It provided for the maintenance of departments for defective delinquents at the Reformatory for Women, at the Massachusetts Reformatory and at the State Farm. On June 13, 1913, a resolve (chapter 123) was approved which provided that the Governor and Council might lease temporary buildings and grounds for the care of defective delinquents at an expense, including the cost attending the custody and support of defective delinquents, not exceeding $25,000.

The Board of Prison Commissioners attempted to find suitable buildings and grounds which could be favorably recommended to the Governor and Council for lease, but was not successful. Hence no further progress was made.

Dr. Walter E. Fernald: — In the institutions we are facing a rather anomalous situation. We have this law. The state of public sentiment is such that we are not able to discharge into the community the class of people we refer to. Insane hospitals and prisons now have great difficulties with this class, and reformatories and schools for the feeble-minded are not able to discharge them. Public sentiment is such that it will not tolerate the discharge of these persons, and yet there is no adequate provision made for taking permanent care of them.

It should not be forgotten that an adequate plan for caring for these people means permanent care for a large number, and that means a large population within a few years, because most of them, if I know them, will need close supervision as long as they live.

This plan will reduce the prison population because it is from this defective delinquent class that the "repeater" comes. Every defective delinquent cared for in the special institution will reduce the number to be cared for in the prisons and other institutions.

My one point now is that it is an immense problem, and a problem that all the institutions are compelled to face.

Dr. V. V. Anderson, probation officer: — I did not intend to say anything. I am impressed with one fact that has not been brought out: that is, the importance of the adult feeble-minded passing through our courts. More particularly has the

institutional side of the situation been presented. We have in the municipal court of Boston over 50,000 people a year passing through, and many of them are handled over and over again, — individuals arrested forty, fifty and seventy-five times.

Now these individuals, many of them, are sent to the house of correction and then out into society again; then into the courts and again to the house of correction. That is the way it goes; their life history is spent that way. These individuals are being daily examined in the courts, and found to be feeble-minded — many of them. Assuming that about 10 per cent. are feeble-minded, we would have between 5,000 and 6,000 passing through our courts in a year. We have no means whatever of handling the situation; there is no provision at all made for institutional care of these individuals, and many of the courts and judges are rather loath to punish them because they don't feel that they are responsible. Certainly it is the most vital problem we have to handle in our courts, as it seems to be the very backbone.

Mrs. Jessie D. Hodder, superintendent of the Massachusetts Reformatory for Women: — May I ask Dr. Fernald about the defective delinquent institution? Should you say that these feeble-minded recidivists who are going through our courts would form perhaps one cottage or psychopathic group, such as Dr. Southard has spoken of, — of which class we get perhaps 30 or 35, — and beyond that number would form another cottage; in short, that this new defective delinquent institution should be a group of specialized cottages that would take the various groups of people that the other institutions find most difficult, and therefore would become for the next series of years a dumping place for the institutions?

Dr. Walter E. Fernald: — I agree with Mrs. Hodder as to the probable line of action if we are unfortunate enough to be compelled to organize a new institution for this class at this time, when we know so little about them. In such an institution the laboratory — using the word laboratory in its broadest sense — would be the most important building of the institution, for the greatest need with this class at the present time is to have definite processes of measuring mentality and of evaluating the degrees of responsibility of these different types.

The trouble is that at the present time no one man and no one organization has knowledge enough to wisely plan a new institution for defective delinquents. Unless the new institution were planned on very elastic lines there would be grave danger of starting on a wrong basis. The work which you are doing at Sherborn, and the work which is shown on this chart, is strongly suggestive, of course, of the primary classification which would be made in that institution.

I am quite sure that the Legislature will be responsive to any request or any plan which has the support of this organization. The fate of the futile attempts which have been made in the past to get an appropriation for this purpose was due to the fact that every witness had a different point of view. It seems to me at such a meeting as we are talking about the doors should be locked until we have thrashed the thing out and have agreed upon the undebatable facts, and have formulated a well thought out plan.

Dr. A. Warren Stearns, assistant physician, Out-patient Department, Psychopathic Department, Boston State Hospital: — I will take only a minute. In taking an examination there are two types of men, — one takes the hardest question and wrestles with that, the other takes the easiest. For the one who takes the easiest all things are then easy. From my experience it seems to me that at this meeting we are taking the hardest part of the whole problem. I think there are innumerable definitely insane, easily recognized as such; definitely feeble-minded who are easily recognized as such, in our prisons. I have in mind one man who was discharged by Dr. Fernald a short while ago, much against advice, and who went home and raped his sister, and was given ten years' sentence at Charlestown, and stayed there about a year.

Mr. Cecelio S. Rossy, special investigator to the State Board of Insanity: — I have little to add to what Dr. Stearns has said, but I think that he neglected to call attention to the point so much emphasized by Professor Yerkes, Dr. Southard and Dr. Fernald, *i.e.*, the improvement of the method; the study of the method for approaching the individual is at the present moment the principal problem we have to face. Having improved our method and results, we can then go ahead and

make provisions necessary for the final disposition of these patients.

Mr. Walter Rapp: — I have listened with a great deal of interest to what Dr. Fernald has said. There is one question that I should like to ask Dr. Fernald, and that is this: we trustees go through our institutions and find cases innumerable where, to talk to the patients, you would think they were perfectly sane. They are not violent; they have no hallucinations. They work in the laundry; they work about the grounds. They ask whether they can be sent home or whether they can be boarded out, and the answer we get back invariably is, "They are mentally defective." Now I was wondering if there isn't any possible chance of giving these people a chance, instead of keeping them there with a lot of disturbed patients. I have in mind now one or two cases where they say, "I know that in times past I have done so and so, and I regret it, and I would like to go out;" and yet the doctors (they say it wisely and they know, perhaps, what is best) say no. But we, as trustees, are confronted with that problem time after time, and what are we to do about it? We have to leave it entirely to them.

Now, to my mind, if the State could take such cases as these and separate them into a different building this would perhaps be wise. But it is something that I have given a great deal of thought to, and I would really like to know what to tell these people when they interview me; and I am sure the other trustees would like to find out the same thing.

Mr. Ellerton James: — I will cite a recent case at Wrentham. There was a girl in Wrentham who tested about ten and a half or eleven years of age by the measurements which you have spoken of. The chairman of the board of selectmen of her town on the Cape, another prominent citizen of the town, her father, an uncle and cousin, pretty good people from the Cape, came up and wanted to get that girl out. We spent an hour and a half, on a very stormy afternoon, talking to them. We told them that if that girl got out, in our judgment, she would become pregnant. They said, "We appreciate that fact; we know what we are up against, but we will see that she does not have a chance to have anything to do with men." We were overcome. This is a matter of some two months ago.

That girl is back in the Wrentham State School now, pregnant. That is your answer.

Dr. O'Meara: — I am glad this question has been raised. It presents a difficulty that has bothered me, and I am anxious to have the matter discussed freely and to listen to the opinions of others.

On different occasions I have interviewed girls in each of the State hospitals who have appealed to the State Board of Insanity for release. At some time these girls have borne children out of wedlock. The mental and chronological ages of girls of this type are out of accord. They test defective; and because feeble-mindedness is a permanent disability and not to be recovered from, and because defectivity manifests itself in criminality, they are detained in the hospitals for the insane, there to be kept until they die.

I am convinced of the justice of detaining them, but not in insane hospitals. To discharge these people and expose them to dangers which they cannot resist would not be fair from the standpoint of the individual nor just in the interests of the community.

Appeals have been made to release them so that they may marry. Marriage is a contract, both a civil and, in many instances, a religious contract. The right of the State to specify the conditions necessary for the civil contract is not questioned. The State demands that the individual shall have attained a specified chronological age before entering into this contract, because the consensus of expert opinion, accepted by the State as wisdom, assumes that judgment, with knowledge and discrimination, and a full sense of the responsibility for the act, do not appear until the individual arrives at this period in life.

The church refuses to recognize a marriage where either one of the parties is *non compos*, because marriage is a sacramental contract, and a person who is *non compos* cannot enter into a contract. Contracts made by irresponsible individuals are not binding and are not, rightly speaking, contracts at all. No one who is either physically or morally unfit to discharge the duties of married life is regarded by the church as fit for marriage; and individuals are looked upon as morally unfit who are so defective as to be incapable of caring for the offspring.

The principle, both civil and religious, is that a mental development must be reached that will enable the individual to appreciate the binding force and responsibilities, with all that they may entail, of the contract about to be entered upon. The age differs in different countries, but it is never less than twelve. Therefore, feeble-mindedness and contract-making are not in accord. Feeble-minded individuals are supposed never to attain a mental age beyond the twelfth year, and, consequently, are never capable of either making or fulfilling a contract.

When individuals are in conflict with society because they lack in self-repression or fail in a proper interpretation of right and wrong to determine responsibility, the question at issue is, whether, because of brain infirmity or brain defect, there is any quality, or lack of it, which inhibits normal judgment and a reasonable self-control. The innumerable cases that Mr. Rapp cites are in the hospitals because of an inability to get along outside, and this is because of defectivity. I am convinced that, having once demonstrated an incapacity to live in the community, it is a serious matter to accept the responsibility of returning them to it.

Will Dr. Fernald please give us his point of view?

Dr. Walter E. Fernald: — Of course, this is a very large subject to consider. The cases to which Mr. Rapp refers and the case to which Mr. James refers are typical of a very large group. I will answer by saying that these social workers will not let us turn these cases out, even if we feel justified in doing so. If we do discharge them they are brought back again, and only too often they come back in the condition described by Mr. James.

As a matter of fact, they are very glib and plausible; they look like normal persons, they are persuasive, and they melt the heart of the ordinary citizen without any trouble. When brought into court these cases are invariably discharged.

The sex offence and its consequences are only a part of the story. I very much doubt if any patient is committed where the sex offence alone is considered of very great importance, because, as a matter of fact, this whole class has never been self-supporting and self-controlling. These nine-year minds have not sufficient mental equipment to enable them to get a

living or to take care of themselves. The fact that they have committed sex offences or have had a baby is only one evidence that their power of self-control and self-direction is lacking.

The chances are that they come from pretty poor stock, where the families were not able to give them the bringing-up or the background and environment necessary to keep straight and to earn a living.

As a matter of fact, these girls are sent to you because the community refuses longer to tolerate them. If you dismiss them they will very soon be returned into the custody of the Commonwealth in some way. They will go to the lying-in hospitals or become paupers, not able to support themselves.

I think Mrs. Hodder's cases which she demonstrated at Pittsfield showed that some of our defective delinquent girls have gone to ten or eleven different institutions in turn. They have been dismissed from the insane hospitals and have gone to the lying-in hospital; from the lying-in hospital to Sherborn; from Sherborn to Waverley; from Waverley to some other institution; and it is a question just what institution will have custody of them at any given time.

They are a very unfortunate class, and their apparent normality and apparent efficiency are most deceiving to one unaccustomed to their care.

The clinicians and the psychologists have formulated many tests which corroborate the popular belief that these people are not responsible; but, after all, the supreme test, of course, is the test of behavior and conduct as measured by their reactions to the temptations and opportunities of ordinary community life.

Mr. Rapp: — The doctor is trying to build up a test to prove that they are not responsible. Why not try to build up a test to prove that they are responsible? It may be all true what you say (I haven't the slightest doubt, because I bow to your judgment and I know that you believe that you are correct), still, on the other hand, if there is one woman we can save in six it is worth the test, even if the other five do come back. As regards their not being able to take care of themselves, if they are able to do a day's work in our hospital they are able to do a day's work outside.

Mrs. Margaret Cashman, secretary, trustees of Grafton State Hospital: — It does not seem to me that these defective delinquents should be with the insane. Should they not have some separate institution where they will have supervision and still have the freedom which persons of their type should have, and yet be looked after as far as their morals are concerned?

Dr. Walter E. Fernald: — I do not want Mr. Rapp to think that I am offering a brief for the prejudging of any of these individuals. I am quite sure that the survey of our discharged patients will show that we have had pretty liberal views as to the discharge of doubtful cases.

As a matter of fact, your girls and women at Medfield are those who have not seemed to measure up to the point where your own authorities have felt justified in releasing them. You have already discharged the cases you think ought to be discharged. The women you refer to are the residual mass, and they furnish their own test. It may be the fact that their custody began with the assumption that they were not responsible. Their conduct in the institution has proved that they ought not to be sent back to the community.

We have found that the after-care work with the boys — the frequent visiting by the social workers, the return to the institution at regular periods, the long-continued advice and counsel — has enabled many of the boys to go out and get on well at home who ten years ago would have been kept in the institution. We have not been so fortunate with the female cases, but it is possible that scientific research of these cases in the institutions and in the community may enable us to differentiate in the future between the defectives who can be trusted in the community and those who cannot be so trusted.

FINANCIAL STATISTICS.

TABLE 1. — *Balance Sheet, 1915.*

Inventory, Nov. 30, 1914,		$17,209,574 45		Inventory, Nov. 30, 1915,		$17,610,837 84	
Unexpended balance of special appropriations,		341,980 03		Unexpended balance of special appropriations,		234,806 42	
				Unexpended balance of maintenance appropriation reverting to State treasury,		54,670 22	
Accounts receivable,		55,311 32		Accounts receivable,		71,957 16	
Private funds,		69,629 86		Private funds,		67,326 48	
Total resources,			$17,676,505 26	Total resources,			$18,039,598 12
Net increase in value of property,			429,999 24	Net depreciation in value of property,			14,393 39
Maintenance appropriations granted,			3,862,718 88	Expenditures from maintenance appropriations,			3,808,048 66
Special appropriations granted,			190,894 54	Expenditures from special appropriations,			288,605 66
				Unexpended balances of special appropriations reverting to State treasury,			9,472 09
Receipts from all sources except State Treasurer,			391,939 90	Money received and remitted to State treasury,			391,939 90
Aggregate,			$22,552,057 82	Aggregate,			$22,552,057 82

TABLE 2. — *Financial Summary for the Year ending Nov. 30, 1915.*

INSTITUTIONS.	RESOURCES Nov. 30, 1915.					
	Inventory.	Unexpended Balance of Special Appropriations.	Unexpended Balance of Maintenance Appropriations reverting to State Treasury.	Accounts Receivable.	Private Funds.	Total Resources.
The insane: —						
Worcester Hospital,	$2,206,572 48	–	$207 31	$12,388 01	$8,504 74	$2,227,672 54
Taunton Hospital,	911,078 22	–	1,733 30	7,527 26	–	920,338 78
Northampton Hospital,	1,061,068 64	–	139 72	17,453 14	681 00	1,079,342 50
Danvers Hospital,	1,876,788 19	–	4,361 39	9,958 65	–	1,891,108 23
Westborough Hospital,	1,038,444 83	$5,019 07	1,396 84	6,133 51	3,645 11	1,054,639 36
Boston Hospital, including Psychopathic Department,	2,954,586 20	1,154 76	185 13	10,250 26	–	2,966,176 35
Grafton Hospital,	1,901,064 83	59,246 67	821 17	1,520 85	–	1,962,653 52
Medfield Hospital,	1,703,908 33	21,921 58	22,700 66	1,420 88	–	1,749,951 45
Foxborough Hospital,	342,038 58	47,692 71	33	148 11	–	389,879 73
Gardner Colony,	667,825 52	4,771 14	264 39	98 25	–	672,959 30
Totals,	$14,663,375 82	$139,805 93	$31,810 24	$66,898 92	$12,830 85	$14,914,721 76
Miscellaneous: —						
Monson Hospital,	$960,573 56	$3,331 97	$182 81	$1,194 16	–	$965,282 50
Massachusetts School for Feeble-minded at Waltham,	1,065,862 34	3,586 21	1,433 74	3,648 05	$54,495 63	1,129,025 97
Wrentham School,	921,026 12	88,082 31	21,243 43	216 03	–	1,030,567 89
Totals,	$2,947,462 02	$95,000 49	$22,859 98	$5,058 24	$54,495 63	$3,124,876 36
Aggregates,	$17,610,837 84	$234,806 42	$54,670 22	$71,957 16	$67,326 48	$18,039,598 12

TABLE 2. — *Financial Summary for the Year ending Nov. 30, 1915* — Continued.

INSTITUTIONS.	Net Decrease in Resources during Year 1915.	EXPENDITURES.		Unexpended Balances of Special Appropriations reverting to State Treasury.	Money remitted to State Treasury from Receipts.	Aggregates.
		Maintenance Appropriations.	Special Appropriations.			
The insane: —						
Worcester Hospital,	–	$372,576 99	$285 00	$627 21	$53,170 47	$2,654,332 21
Taunton Hospital,	$5,892 66	321,316 70	896 99	2 50	39,310 80	1,287,758 43
Northampton Hospital,	–	207,660 28	12,631 00	14 37	52,907 87	1,352,556 02
Danvers Hospital,	–	367,108 61	–	–	63,973 95	2,322,190 79
Westborough Hospital,	–	341,255 83	12,853 39	937 90	74,283 65	1,483,970 13
Boston Hospital, including Psychopathic Department,	–	474,516 71	9,489 78	7,541 95	43,822 82	3,501,547 61
Grafton Hospital,	–	359,478 83	67,335 43	1 91	13,796 31	2,403,266 00
Medfield Hospital,	–	384,209 34	3,078 42	–	13,390 68	2,150,629 89
Foxborough Hospital,	–	108,794 68	1,307 29	–	2,543 23	502,524 93
Gardner Colony,	–	166,664 86	9,828 28	6 11	2,537 80	851,996 35
Totals,	$5,892 66	$3,103,582 83	$117,705 58	$9,131 95	$359,737 58	$18,510,772 36
Miscellaneous: —						
Monson Hospital,	–	$249,825 27	$35,582 40	$316 97	$14,922 67	$1,265,929 81
Massachusetts School for Feeble-minded at Waltham,	$8,500 73	309,833 14	3,413 79	–	14,759 07	1,465,532 70
Wrentham School,	–	144,807 42	131,903 89	23 17	2,520 58	1,309,822 95
Totals,	$8,500 73	$704,465 83	$170,900 08	$340 14	$32,202 32	$4,041,285 46
Aggregates,	$14,393 39	$3,808,048 66	$288,605 66	$9,472 09	$391,939 90	$22,552,057 82

TABLE 2. — *Financial Summary for the Year ending Nov. 30, 1915* — Continued.

INSTITUTIONS.	RESOURCES NOV. 30, 1914.				
	Inventory.	Unexpended Balance of Special Appropriations.	Accounts Receivable.	Private Funds.	Total Resources.
The insane: —					
Worcester Hospital,	$2,203,522 62	$912 21	$10,474 58	$8,638 19	$2,223,547 60
Taunton Hospital,	916,153 12	899 49	8,345 02	–	925,397 63
Northampton Hospital,	1,045,623 36	12,645 37	14,952 93	668 56	1,073,890 22
Danvers Hospital,	1,858,820 58	–	3,889 13	–	1,862,709 71
Westborough Hospital,	1,019,979 59	18,810 36	2,911 21	3,523 11	1,045,224 27
Boston Hospital, including Psychopathic Department,	2,937,684 64	16,928 25	6,792 32	–	2,961,405 21
Grafton Hospital,	1,847,275 45	107,584 01	1,092 51	–	1,955,951 97
Medfield Hospital,	1,675,463 34	–	–	–	1,675,463 34
Foxborough Hospital,	337,096 89	–	50 00	–	337,146 89
Gardner Colony,	658,422 22	605 53	–	–	659,027 75
Totals,	$14,500,041 81	$158,385 22	$48,507 70	$12,829 86	$14,719,764 59
Miscellaneous: —					
Monson Hospital,	$894,486 25	$35,231 34	$1,227 53	–	$930,945 12
Massachusetts School for Feeble-minded at Waltham,	1,070,446 79	3,500 00	5,259 96	$56,800 00	1,136,006 75
Wrentham School,	744,599 60	144,873 07	316 13	–	889,788 80
Totals,	$2,709,532 64	$183,604 41	$6,803 62	$56,800 00	$2,956,740 67
Aggregates,	$17,209,574 45	$341,989 63	$55,311 32	$69,629 86	$17,676,505 26

TABLE 2. — *Financial Summary for the Year ending Nov. 30, 1915* — Concluded.

INSTITUTIONS.	Net Increase in Valuation.	APPROPRIATIONS.		Receipts from All Sources except State Treasurer.	Aggregates.
		Maintenance.	Special.		
The insane: —					
Worcester Hospital,	$4,829 84	$372,784 30	-	$53,170 47	$2,654,332 21
Taunton Hospital,	-	323,050 00	-	39,310 80	1,287,758 43
Northampton Hospital,	17,957 93	207,800 00	-	52,907 87	1,352,556 02
Danvers Hospital,	24,037 13	371,470 00	-	63,973 95	2,322,190 79
Westborough Hospital,	21,809 54	342,652 67	-	74,283 65	1,483,970 13
Boston Hospital, including Psychopathic Department,	20,359 50	474,701 84	$1,258 24	43,822 82	3,501,547 61
Grafton Hospital,	54,217 72	360,300 00	19,000 00	13,796 31	2,403,266 00
Medfield Hospital,	29,865 87	406,910 00	25,000 00	13,390 68	2,150,629 89
Foxborough Hospital,	5,039 80	108,795 01	49,000 00	2,543 23	502,524 93
Gardner Colony,	9,501 55	166,929 25	14,000 00	2,537 80	851,996 35
Totals,	$187,618 88	$3,135,393 07	$108,258 24	$359,737 58	$18,510,772 36
Miscellaneous: —					
Monson Hospital,	$66,053 94	$250,008 08	$4,000 00	$14,922 67	$1,265,929 81
Massachusetts School for Feeble-minded at Waltham,	-	311,266 88	3,500 00	14,759 07	1,465,532 70
Wrentham School,	176,326 42	166,050 85	75,136 30	2,520 58	1,309,822 95
Totals,	$242,380 36	$727,325 81	$82,636 30	$32,202 32	$4,041,285 46
Aggregates,	$429,999 24	$3,862,718 88	$190,894 54	$391,939 90	$22,552,057 82

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915.*

INSTITUTIONS.	REAL ESTATE.							
	LAND.							
	GROUNDS AND BUILDING SITES.		WOODLAND.		MOWING.		TILLAGE.	
	Acres.	Value.	Acres.	Value.	Acres.	Value.	Acres.	Value.
The insane: —								
Worcester Hospital,	137	$247,440 00	182	$13,560 00	84	$90,372 44	111	$73,127 56
Taunton Hospital,	26	6,500 00	50	10,000 00	92	13,800 00	70	10,500 00
Northampton Hospital,	23	4,861 20	93	19,655 55	110	23,248 50	100	21,135 00
Danvers Hospital,	26	30,000 00	40	1,600 00	176	26,000 00	79	11,250 00
Westborough Hospital,	50	10,000 00	193	9,646 50	43	647 00	247	22,228 00
Boston Hospital, including Psychopathic Department,	49	242,354 40	7	3,080 00	120	495,315 04	57	234,622 98
Grafton Hospital,	11	193,800 00	362	9,490 00	208	8,321 60	160	6,400 00
Medfield Hospital,	75	40,000 00	233	2,876 39	54	1,312 20	63	1,530 80
Foxborough Hospital,	21	6,220 00	20	4,100 00	3	700 00	38	7,750 00
Gardner Colony,	200	5,003 88	750	14,990 20	80	2,800 00	118	7,809 24
Totals,	618	$786,179 48	1,930	$88,998 64	970	$662,516 78	1,043	$396,353 58
Miscellaneous: —								
Monson Hospital,	80	$5,475 00	287	$5,773 00	152	$14,544 00	51	$5,126 00
Massachusetts School for Feeble-minded at Waltham,	68	16,953 00	1,428	23,143 00	287	25,806 00	–	–
Wrentham School,	25	6,000 00	220	13,200 00	39	3,900 00	71	7,100 00
Totals,	173	$28,428 00	1,935	$47,116 00	478	$44,250 00	122	$12,226 00
Totals, hospitals and miscellaneous,	791	$814,607 48	3,865	$136,114 64	1,448	$706,766 78	1,165	$408,579 58

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	REAL ESTATE.					
	LAND — Con.					
	PASTURE.		MISCELLANEOUS.		TOTALS.	
	Acres.	Value.	Acres.	Value.	Acres.	Value.
The insane: —						
Worcester Hospital,	64	$2,580 00	–	–	578	$427,080 00
Taunton Hospital,	95	11,875 00	–	–	333	52,675 00
Northampton Hospital,	185	39,099 75	–	–	511	108,000 00
Danvers Hospital,	188	4,750 00	–	–	509	73,600 00
Westborough Hospital,	194	5,832 60	36	$1,589 90	763	49,944 00
Boston Hospital, including Psychopathic Department,	–	–	2	11,236 30	235	986,608 72
Grafton Hospital,	180	3,970 34	–	–	921	221,981 94
Medfield Hospital,	16	400 00	–	–	441	46,119 39
Foxborough Hospital,	21	3,260 00	–	–	103	22,030 00
Gardner Colony,	580	5,800 00	50	250 00	1,778	36,653 32
Totals,	1,523	$77,567 69	88	$13,076 20	6,172	$2,024,692 37
Miscellaneous: —						
Monson Hospital,	81	$2,534 00	10	$450 00	661	$33,902 00
Massachusetts School for Feeble-minded at Waltham,	209	2,510 00	–	–	1,992	73,412 00
Wrentham School,	140	7,000 00	–	–	495	37,200 00
Totals,	430	$12,044 00	10	$450 00	3,148	$144,514 00
Totals, hospitals and miscellaneous,	1,953	$89,611 69	98	$13,526 20	9,320	$2,169,206 37

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	REAL ESTATE — CON.				
	BUILDINGS.				
	Patients.	Nurses.	Farm, Stable and Grounds.	Miscellaneous.	Totals.
The insane: —					
Worcester Hospital,	$1,187,117 00	$100,268 79	$70,117 28	$1,500 00	$1,359,003 07
Taunton Hospital,	409,124 72	69,040 00	54,490 00	79,040 00	611,694 72
Northampton Hospital,	468,464 25	-	41,300 00	78,442 00	588,206 25
Danvers Hospital,	1,414,700 00	11,900 00	37,200 00	63,700 00	1,527,500 00
Westborough Hospital,	504,225 00	45,050 00	20,285 00	47,316 00	616,876 00
Boston Hospital, including Psychopathic Department,	1,254,829 86	31,936 79	13,245 00	194,815 53	1,494,827 18
Grafton Hospital,	918,797 00	100,910 00	15,275 00	179,850 00	1,214,832 00
Medfield Hospital,	734,438 12	138,452 53	65,587 00	407,365 89	1,345,843 54
Foxborough Hospital,	116,745 34	20,250 00	7,063 96	33,903 43	177,962 73
Gardner Colony,	234,516 40	14,690 93	36,641 11	57,168 27	343,016 71
Totals,	$7,242,957 69	$532,499 04	$361,204 35	$1,143,101 12	$9,279,762 20
Miscellaneous: —					
Monson Hospital,	$407,606 25	$34,758 75	$31,953 75	$70,162 50	$544,481 25
Massachusetts School for Feeble-minded at Waltham,	423,032 25	62,250 00	21,846 00	104,839 50	611,967 75
Wrentham School,	393,600 00	58,850 00	18,100 00	92,500 00	563,050 00
Totals,	$1,224,238 50	$155,858 75	$71,899 75	$267,502 00	$1,719,499 00
Totals, hospitals and miscellaneous,	$8,467,196 19	$688,357 79	$433,104 10	$1,410,603 12	$10,999,261 20

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	REAL ESTATE — CON.					Aggregates.
	BETTERMENTS.					
	Water System and Appurtenances.	Drainage System and Appurtenances.	Heating and Lighting System and Appurtenances.	Miscellaneous.	Totals.	
The insane: —						
Worcester Hospital,	$96,866 98[1]	–	$120,106 16	$29,029 87	$246,003 01	$2,032,086 08
Taunton Hospital,	42,479 70	$17,848 31	52,950 86	782 45	114,061 32	778,431 04
Northampton Hospital,	24,131 08	21,350 00	32,130 13	161,170 11	238,781 32	934,987 57
Danvers Hospital,	24,095 01	–	75,137 98	700 00	99,932 99	1,701,032 99
Westborough Hospital,	95,181 25	28,989 00	78,455 15	4,345 60	206,971 00	873,791 00
Boston Hospital, including Psychopathic Department,	–	–	–	320,973 23	320,973 23	2,802,409 13
Grafton Hospital,	39,209 33	53,755 20	24,653 76	193,165 21	310,783 50	1,747,597 44
Medfield Hospital,	47,000 00	16,000 00	58,100 00	14,450 00	135,550 00	1,527,512 93
Foxborough Hospital,	7,765 59	11,571 30	–	69,627 62	88,964 51	288,957 24
Gardner Colony,	36,573 76	20,539 54	30,219 63	96,921 13	184,254 06	563,924 09
Totals,	$413,302 70	$170,053 35	$471,753 67	$891,165 22	$1,946,274 94	$13,250,729 51
Miscellaneous: —						
Monson Hospital,	$24,660 98	$26,303 27	$2,878 65	$176,048 94	$229,891 84	$808,275 09
Massachusetts School for Feeble-minded at Waltham,	–	–	16,258 08	206,199 37	222,457 45	907,837 20
Wrentham School,	23,800 00	53,850 00[2]	157,000 00	–	234,650 00	834,900 00
Totals,	$48,460 98	$80,153 27	$176,136 73	$382,248 31	$686,999 29	$2,551,012 29
Totals, hospitals and miscellaneous,	$461,763 68	$250,206 62	$647,887 40	$1,273,413 53	$2,633,274 23	$15,801,741 80

[1] Includes drainage.

[2] Includes plumbing.

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	PERSONAL PROPERTY.					
	PROVISIONS AND GROCERIES.		CLOTHING AND CLOTHING MATERIAL.		FURNISHINGS.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —						
Worcester Hospital,	$8,824 68	$2,070 33	$11,452 28	$274 58[1]	$81,676 51	$5,440 11
Taunton Hospital,	8,240 35	3,939 99	8,639 31	907 79	69,616 28	3,641 97
Northampton Hospital,	7,046 40	1,534 77[1]	6,282 84	715 17	47,881 80	7,263 82
Danvers Hospital,	12,350 18	3,621 30	9,257 27	454 74	68,676 41	3,236 65
Westborough Hospital,	15,591 13	1,564 89	7,457 08	803 03[1]	73,574 06	3,274 02
Boston Hospital, including Psychopathic Department,	9,564 98	5,754 33	11,894 73	370 97	80,742 11	4,908 10
Grafton Hospital,	5,639 07	986 30[1]	19,985 60	8,353 91	62,326 66	4,890 56[1]
Medfield Hospital,	11,414 04	3,516 38	33,641 24	1,147 81	59,757 27	3,015 93
Foxborough Hospital,	3,568 27	425 42[1]	4,049 41	1,770 36	18,915 55	4,418 98
Gardner Colony,	8,039 93	1,298 15[1]	10,490 05	1,404 93	34,584 39	238 14
Totals,	$90,269 03	$16,222 58	$123,149 81	$14,048 07	$597,751 04	$30,547 16
Miscellaneous: —						
Monson Hospital,	$4,477 64	$1,318 85	$10,766 99	$5,496 85	$70,746 74	$2,815 95
Massachusetts School for Feeble-minded at Waltham,	11,933 21	2,231 23	14,030 84	1,295 94[1]	70,800 68	1,574 85
Wrentham School,	3,334 48	1,071 94	7,018 85	970 61[1]	42,302 39	5,662 75
Totals,	$19,745 33	$4,622 02	$31,816 68	$3,230 30	$183,849 81	$10,053 55
Totals, hospitals and miscellaneous,	$110,014 36	$20,844 60	$154,966 49	$17,278 37	$781,600 85	$40,600 71

[1] Decrease.

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	PERSONAL PROPERTY — CON.							
	HEAT, LIGHT AND POWER.		REPAIRS AND IMPROVEMENTS.		FARM, STABLE AND GROUNDS.		INDUSTRIES.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —								
Worcester Hospital,	$10,065 74	$6,176 25	$4,210 39	$1,594 48	$38,749 44	$10,046 49[1]	$2,251 46	$665 46
Taunton Hospital,	9 44	8,180 41[1]	2,574 12	2,520 44[1]	31,788 83	1,020 63[1]	3,123 56	293 14[1]
Northampton Hospital,	5,882 15	673 94	5,333 44	284 31	50,115 55	5,494 23	108 20	108 20
Danvers Hospital,	4,724 08	3,192 97	19,369 50	10,277 75[1]	43,189 43	16,321 50	4,745 35	910 11
Westborough Hospital,	1,586 80	1,512 53[1]	14,321 37	8,041 13	38,302 57	1,526 58[1]	1,751 93	1,450 73
Boston Hospital, including Psychopathic Department,	2,864 00	1,534 55	6,159 31	1,949 31	15,135 26	2,894 48[1]	3,062 84	1,920 00
Grafton Hospital,	13,574 19	3,771 50[1]	13,162 19	414 26	30,436 80	911 09[1]	2,148 63	436 87[1]
Medfield Hospital,	3,687 42	8,890 48[1]	5,031 35	13 56	55,110 35	5,405 34	2,404 10	829 90
Foxborough Hospital,	4,414 74	383 39	3,248 27	1,944 77[1]	12,848 90	412 96	444 31	119 67
Gardner Colony,	3,963 57	1,335 60[1]	6,447 42	53 69	30,313 20	6,922 75	5,601 01	1,271 96
Totals,	$50,772 13	$11,729 42[1]	$79,857 36	$2,392 22[1]	$345,990 33	$18,157 51	$25,641 39	$6,546 02
Miscellaneous: —								
Monson Hospital,	$18,803 78	$3,073 01	$5,536 48	$1,449 13	$31,307 94	$7,499 35	$1,986 04	$765 04
Massachusetts School for Feeble-minded at Waltham,	13,334 83	3,288 41[1]	4,205 33	1,205 61[1]	33,565 38	3,776 04[1]	2,802 08	1,245 37[1]
Wrentham School,	5,746 80	59 21	1,182 70	340 47	15,784 28	5,459 18	2,673 67	1,185 92
Totals,	$37,885 41	$156 19[1]	$10,924 51	$583 99	$80,657 60	$9,182 49	$7,461 79	$705 59
Totals, hospitals and miscellaneous,	$88,657 54	$11,885 61[1]	$90,781 87	$1,808 23[1]	$426,647 93	$27,340 00	$33,103 18	$7,251 61

[1] Decrease.

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Continued.

INSTITUTIONS.	REAL AND PERSONAL PROPERTY.					
	MISCELLANEOUS.		TOTAL VALUATION OF PERSONAL PROPERTY.		TOTAL VALUATION OF REAL PROPERTY.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —						
Worcester Hospital,	$17,255 90	$5,105 46	$174,486 40	$10,731 02	$2,032,086 08	$7,681 16[1]
Taunton Hospital,	8,655 29	2,399 86	132,647 18	1,125 01[1]	778,431 04	3,949 89[1]
Northampton Hospital,	3,430 69	470 68	126,081 07	13,475 58	934,987 57	1,969 70
Danvers Hospital,	13,442 98	5,861 14	175,755 20	23,320 66	1,701,032 99	5,353 05[1]
Westborough Hospital,	12,068 89	3,851 46	164,653 83	14,340 09	873,791 00	4,125 15
Boston Hospital, including Psychopathic Department,	22,763 84	4,594 93	152,177 07	18,137 71	2,802,409 13	1,236 15[1]
Grafton Hospital,	6,194 25	270 96[1]	153,467 39	2,499 11[1]	1,747,597 44	56,288 49
Medfield Hospital,	5,349 63	29 24[1]	176,395 40	5,009 20	1,527,512 93	23,435 79
Foxborough Hospital,	5,591 89	1,739 64	53,081 34	6,474 81	288,957 24	5,739 26[1]
Gardner Colony,	4,461 86	1,495 94	103,901 43	8,753 66	563,924 09	649 64
Totals,	$99,215 22	$25,218 91	$1,412,646 31	$96,618 61	$13,250,729 51	$62,509 26
Miscellaneous: —						
Monson Hospital,	$3,672 86	$1,931 70	$152,298 47	$24,349 88	$808,275 09	$43,266 43
Massachusetts School for Feeble-minded at Waltham,	7,352 79	1,353 84	158,025 14	5,651 45[1]	907,837 20	1,067 00
Wrentham School,	8,082 95	5,149 61	86,126 12	17,958 47	834,900 00	158,468 05
Totals,	$24,108 60	$8,435 15	$396,449 73	$36,656 90	$2,551,012 29	$202,801 48
Totals, hospitals and miscellaneous,	$123,323 82	$33,654 06	$1,809,096 04	$133,275 51	$15,801,741 80	$265,310 74

[1] Decrease.

TABLE 3. — *Inventory of State Institutions, Nov. 30, 1915* — Concluded.

INSTITUTIONS.	REAL AND PERSONAL PROPERTY — CON.					
	TOTAL REAL AND PERSONAL.		PRIVATE FUNDS.		TOTAL INVENTORY.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —						
Worcester Hospital,	$2,206,572 48	$3,049 86	$8,504 74	$133 45[1]	$2,215,077 22	$2,916 41
Taunton Hospital,	911,078 22	5,074 90[1]	–	–	911,078 22	5,074 90[1]
Northampton Hospital,	1,061,068 64	15,445 28	681 00	12 44	1,061,749 64	15,457 72
Danvers Hospital,	1,876,788 19	17,967 61	–	–	1,876,788 19	17,967 61
Westborough Hospital,	1,038,444 83	18,465 24	3,645 11	122 00	1,042,089 94	18,587 24
Boston Hospital, including Psychopathic Department,	2,954,586 20	16,901 56	–	–	2,954,586 20	16,901 56
Grafton Hospital,	1,901,064 83	53,789 38	–	–	1,901,064 83	53,789 38
Medfield Hospital,	1,703,908 33	28,444 99	–	–	1,703,908 33	28,444 99
Foxborough Hospital,	342,038 58	735 55	–	–	342,038 58	735 55
Gardner Colony,	667,825 52	9,403 30	–	–	667,825 52	9,403 30
Totals,	$14,663,375 82	$159,127 87	$12,830 85	$0 99	$14,676,206 67	$159,128 86
Miscellaneous: —						
Monson Hospital,	$960,573 56	$67,616 31	–	–	$960,573 56	$67,616 31
Massachusetts School for Feeble-minded at Waltham,	1,065,862 34	4,584 45[1]	$54,495 63	$2,304 37[1]	1,120,357 97	6,888 82[1]
Wrentham School,	921,026 12	176,426 52	–	–	921,026 12	176,426 52
Totals,	$2,947,462 02	$239,458 38	$54,495 63	$2,304 37[1]	$3,001,957 65	$237,154 01
Totals, hospitals and miscellaneous,	$17,610,837 84	$398,586 25	$67,326 48	$2,303 38[1]	$17,678,164 32	$396,282 87

[1] Decrease.

TABLE 4. — *Receipts of State Institutions during the Fiscal Year ending Nov. 30, 1915 (available for Maintenance the Following Year under Section 2, Chapter 175, Acts of 1905).*

INSTITUTIONS.	Receipts for Support.				Receipts on Account of Sales or Refunds.			
	Town.	Reimbursing.	Private.	Total Support.	Salaries, Wages and Labor.	Food.	Clothing and Clothing Material.	Furnishings.
The insane: —								
Worcester Hospital,	–	$16,211 77	$34,579 52	$50,791 29	–	$515 47	$353 15	$66 44
Taunton Hospital,	–	16,950 52	20,157 60	37,108 12	–	7 67	589 42	6 86
Northampton Hospital,	–	16,140 57	34,904 00	51,044 57	–	383 99	275 67	95 51
Danvers Hospital,	–	25,338 98	36,010 14	61,349 12	–	40 65	342 52	–
Westborough Hospital,	–	14,992 00	57,391 55	72,383 55	–	483 57	110 44	39 70
Boston Hospital, including Psychopathic Department,	–	16,097 87	24,998 11	41,095 98	–	923 33	58 50	1 00
Grafton Hospital,	–	11,883 09	233 57	12,116 66	–	16 34	453 00	–
Medfield Hospital,	–	8,409 77	13 57	8,423 34	–	57 26	137 42	205 30
Foxborough Hospital,	–	2,038 53	22 14	2,060 67	–	25 67	8 85	–
Gardner Colony,	–	1,356 51	–	1,356 51	–	11 02	89 21	–
Totals,	–	$129,419 61	$208,310 20	$337,729 81	–	$2,464 37	$2,418 18	$414 81
Miscellaneous: —								
Monson Hospital,	–	$4,527 34	$8,605 17	$13,132 51	$98 37	$259 75	$79 82	$8 12
School for the Feeble-minded at Waltham,	–	1,913 96	11,093 22	13,007 18	–	26 49	342 26	87 83
Wrentham School,	–	1,081 32	361 42	1,442 74	–	7 62	48 53	–
Totals,	–	$7,522 62	$20,059 81	$27,582 43	$98 37	$293 86	$470 61	$95 95
Totals, hospitals and miscellaneous,	–	$136,942 23	$228,370 01	$365,312 24	$98 37	$2,758 23	$2,888 79	$510 76
Mental Wards, State Infirmary,	–	$519 47	–	$519 47	$11 46	–	$149 26	–
Bridgewater Hospital,	–	839 01	–	839 01	–	$2 17	–	$43 51
Totals,	–	$1,358 48	–	$1,358 48	$11 46	$2 17	$149 26	$43 51
Aggregates,	–	$138,300 71	$228,370 01	$366,670 72	$109 83	$2,760 40	$3,038 05	$554 27

TABLE 4. — *Receipts of State Institutions during the Fiscal Year ending Nov. 30, 1915, etc.* — Concluded.

INSTITUTIONS.	RECEIPTS ON ACCOUNT OF SALES OR REFUNDS — CON.					Miscellaneous.	Total Institution Receipts.	Sales on Account of Industries Fund.
	Heat, Light and Power.	Repairs and Improvements.	Farm, Stable and Grounds.	Sundries.	Total Sales or Refunds.			
The insane: —								
Worcester Hospital,	–	$9 89	$194 04	$53 57	$1,192 56	$1,186 62	$53,170 47	$193 10
Taunton Hospital,	–	169 89	380 17	18 48	1,172 49	1,030 19	39,310 80	726 72
Northampton Hospital,	–	–	772 36	128 26	1,655 79	207 51	52,907 87	–
Danvers Hospital,	$1 45	472 91	927 51	263 91	2,048 95	575 88	63,973 95	1,014 22
Westborough Hospital,	–	9 18	315 94	167 03	1,125 86	774 24	74,283 65	740 41
Boston Hospital, including Psychopathic Department,	19 72	27 03	1,137 00	4 50	2,171 08	555 76	43,822 82	153 09
Grafton Hospital,	–	122 50	120 37	158 41	870 62	809 03	13,796 31	146 57
Medfield Hospital,	48 40	66 13	3,905 19	54 91	4,474 61	492 73	13,390 68	429 33
Foxborough Hospital,	38 51	8 30	47 74	–	128 47	354 09	2,543 23	–
Gardner Colony,	3 38	1 62	517 71	236 22	859 16	322 13	2,537 80	234 05
Totals,	$111 46	$887 45	$8,318 03	$1,085 29	$15,699 59	$6,308 18	$359,737 58	$3,637 49
Miscellaneous: —								
Monson Hospital,	–	$53 85	$928 99	$4 65	$1,433 55	$356 61	$14,922 67	$13 28
School for the Feeble-minded at Waltham,	$36 85	38 42	713 48	104 14	1,349 47	402 42	14,759 07	–
Wrentham School,	–	–	613 39	220 50	890 04	187 80	2,520 58	–
Totals,	$36 85	$92 27	$2,255 86	$329 29	$3,673 06	$946 83	$32,202 32	$13 28
Totals, hospitals and miscellaneous,	$148 31	$979 72	$10,573 89	$1,414 58	$19,372 65	$7,255 01	$391,939 90	$3,650 77
Mental Wards, State Infirmary,	–	$243 76	$44 11	$78 47	$527 06	$185 41	$1,231 94	–
Bridgewater Hospital,	–	10 46	1,495 07	726 47	2,277 68	266 45	3,383 14	$1,948 18
Totals,	–	$254 22	$1,539 18	$804 94	$2,804 74	$451 86	$4,615 08	$1,948 18
Aggregates,	$148 31	$1,233 94	$12,113 07	$2,219 52	$22,177 39	$7,706 87	$396,554 98	$5,598 95

TABLE 5. — *Expenses for Maintenance and Net Weekly Per Capitas for the Fiscal Year ending Nov. 30, 1915.*

INSTITUTIONS.	Average Number of Patients.[1]	Salaries, Wages and Labor on Pay Rolls.					Food.	
		Gross Expenses.	Receipts.	Net Expenses.	Weekly per capita.		Gross Expenses.	Receipts.
					1915.	Three Years' Average, 1912-14.		
The insane: —								
Worcester Hospital,	1,463	$151,137 42	-	$151,137 42	$1.9866	$1.9607	$95,822 47	$515 47
Taunton Hospital,	1,299	127,623 59	-	127,623 59	1.8894	1.9341	73,748 40	7 67
Northampton Hospital,	944	83,763 78	-	83,763 78	1.7064	1.5663	57,412 91	383 99
Danvers Hospital,	1,504	153,525 16	-	153,525 16	1.9630	1.9482	80,303 69	40 65
Westborough Hospital,	1,278	152,575 21	-	152,575 21	2.2959	2.2336	73,849 98	483 57
Boston Hospital, excluding Psychopathic Department,	1,467	152,775 84	-	152,775 84	2.0027	2.1433	106,342 54	807 09
Boston Hospital, including Psychopathic Department,	1,559	214,707 30	-	214,707 30	2.6485	2.6744	127,291 13	923 33
Grafton Hospital,	1,503	143,700 88	-	143,700 88	1.8386	1.8346	84,726 11	16 34
Medfield Hospital,	1,654	167,513 26	-	167,513 26	1.9476	1.6691	104,494 21	57 26
Foxborough Hospital,	312	49,012 52	-	49,012 52	3.0210	2.3410	20,998 02	25 07
Gardner Colony,	761	66,182 79	-	66,182 79	1.6725	1.6220	29,204 30	11 02
Totals and averages,	12,277	$1,309,741 91	-	$1,309,741 91	$2.0516	$1.9552[2]	$747,851 22	$2,464 37
Miscellaneous: —								
Monson Hospital,	984	$108,270 65	$98 37	$108,172 28	$2.1141	$1.9599	$57,803 01	$259 75
School for the Feeble-minded at Waltham,	1,611	130,012 43	-	130,012 43	1.5520	1.5750	65,124 52	26 49
Wrentham School,	658	55,455 68	-	55,455 68	1.6207	1.6320	31,168 29	7 62
Totals and averages,	3,253	$293,738 76	$98 37	$293,640 39	$1.7359	$1.7673[3]	$154,095 82	$293 86
Totals and averages, hospitals and miscellaneous,	15,530	$1,603,480 67	$98 37	$1,603,382 30	$1.9855	$1.9127	$901,947 04	$2,758 23
Mental Wards, State Infirmary,	709	$47,098 52	$11 46	$47,087 06	$1.2772	-	$43,060 55	-
Bridgewater Hospital,	812	34,345 56	-	34,345 56	.8134	-	33,354 49	$2 17
Totals and averages,	1,521	$81,444 08	$11 46	$81,432 62	$1.0296	-	$76,415 04	$2 17
Aggregates,	17,051	$1,684,924 75	$109 83	$1,684,814 92	$1.9002	-	$978,362 08	$2,760 40

[1] Includes boarded-out patients.

[2] Excludes Foxborough Hospital.

[3] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FOOD — Con.			CLOTHING AND CLOTHING MATERIALS.				
	Net Expenses.	WEEKLY PER CAPITA.		Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.	
		1915.	Three Years' Average, 1912-14.				1915.	Three Years' Average, 1912-14.
The insane: —								
Worcester Hospital,	$95,307 00	$1.2528	$1.2312	$7,208 33	$353 15	$6,855 18	$0.0901	$0.1210
Taunton Hospital,	73,740 73	1.0917	1.0589	10,907 32	589 42	10,317 90	.1526	.1033
Northampton Hospital,	57,028 92	1.1618	1.1213	4,988 81	275 67	4,713 14	0960	.0934
Danvers Hospital,	80,263 04	1.0263	.9389	7,232 64	342 52	6,890 12	.0881	.1020
Westborough Hospital,	73,366 41	1.1040	1.1502	7,867 79	110 44	7,757 35	.1167	.1108
Boston Hospital, excluding Psychopathic Department,	105,535 45	1.3834	1.2315	8,944 89	58 50	8,886 39	.1165	.1319
Boston Hospital, including Psychopathic Department,	126,367 80	1.5588	1.3835	10,400 82	58 50	10,342 32	.1276	.1396
Grafton Hospital,	84,709 77	1.0839	1.1100	15,713 72	453 00	15,260 72	.1953	.1919
Medfield Hospital,	104,436 95	1.2143	1.0823	20,391 71	137 42	20,254 29	.2355	.2261
Foxborough Hospital,	20,972 95	1.2927	1.2539	4,785 74	8 85	4,776 89	.2944	.2241
Gardner Colony,	29,193 28	.7377	.7179	9,424 21	89 21	9,335 00	.2259	.2000
Totals and averages,	$745,386 85	$1.1676	$1.1055[1]	$98,921 09	$2,418 18	$96,502 91	$0.1512	$0.1444[1]
Miscellaneous: —								
Monson Hospital,	$57,543 26	$1.1246	$1.1178	$5,095 86	$79 82	$5,016 04	$0.0980	$0.1244
School for the Feeble-minded at Waltham,	65,098 03	.7771	.7902	16,010 36	342 26	15,668 10	.1870	.2066
Wrentham School,	31,160 67	.9107	.7344	7,319 35	48 53	7,270 82	.2125	.2132
Totals and averages,	$153,801 96	$0.9092	$0.9234[2]	$28,425 57	$470 61	$27,954 96	$0.1653	$0.1864[2]
Totals and averages, hospitals and miscellaneous,	$899,188 81	$1.1135	$1.0642	$127,346 66	$2,888 79	$124,457 87	$0.1541	$0.1538
Mental Wards, State Infirmary,	$43,060 55	$1.1680	–	$7,345 49	$149 26	$7,196 23	$0.1952	–
Bridgewater Hospital,	33,352 32	.7899	–	10,069 07	–	10,069 07	.2385	–
Totals and averages,	$76,412 87	$0.9661	–	$17,414 56	$149 26	$17,265 30	$0.2183	–
Aggregates,	$975,601 68	$1.1003	–	$144,761 22	$3,038 05	$141,723 17	$0.1598	–

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FURNISHINGS.						
	Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.			
				1915.	Three Years' Average, 1912-14.	Beds, Bedding, Table Linen, etc.	Carpets, Rugs, etc.
The insane: —							
Worcester Hospital,	$16,891 20	$66 44	$16,824 76	$0.2212	$0.2040	$0.1219	$0.0085
Taunton Hospital,	20,004 18	6 86	19,997 32	.2961	.2002	.2090	.0127
Northampton Hospital,	5,453 02	95 51	5,357 51	.1091	.1007	.0690	.0032
Danvers Hospital,	17,352 71	–	17,352 71	.2219	.2257	.0991	.0095
Westborough Hospital,	13,166 34	39 70	13,126 64	.1975	.2045	.0538	.0018
Boston Hospital, excluding Psychopathic Department,	14,151 94	1 00	14,150 94	.1855	.1787	.1067	.0053
Boston Hospital, including Psychopathic Department,	17,882 78	1 00	17,881 78	.2206	.2374	.1202	.0057
Grafton Hospital,	21,236 56	–	21,236 56	.2717	.2041	.1578	.0039
Medfield Hospital,	14,587 62	205 30	14,382 32	.1672	.1385	.0975	.0039
Foxborough Hospital,	4,996 92	–	4,996 92	.3080	.1656	.0933	.0156
Gardner Colony,	5,380 46	–	5,380 46	.1360	.1640	.0373	.0058
Totals and averages,	$136,951 79	$414 81	$136,536 98	$0.2139	$0.1891[1]	$0.1121	$0.0064
Miscellaneous: —							
Monson Hospital,	$9,357 22	$8 12	$9,349 10	$0.1827	$0.1925	$0.0953	$0.0130
School for the Feeble-minded at Waltham,	10,538 75	87 83	10,450 92	.1247	.1450	.0824	.0006
Wrentham School,	4,068 41	–	4,068 41	.1189	.1420	.0271	.0041
Totals and averages,	$23,964 38	$95 95	$23,868 43	$0.1411	$0.1593[2]	$0.0751	$0.0051
Totals and averages, hospitals and miscellaneous,	$160,916 17	$510 76	$160,405 41	$0.1986	$0.1823	$0.1044	$0.0062
Mental Wards, State Infirmary,	$4,798 68	–	$4,798 68	$0.1301	–	–	–
Bridgewater Hospital,	3,639 46	$43 51	3,595 95	.0852	–	–	–
Totals and averages,	$8,438 14	$43 51	$8,394 63	$0.1062	–	–	–
Aggregates,	$169,354 31	$554 27	$168,800 04	$0.1904	–	–	–

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FURNISHINGS — Con.		HEAT, LIGHT AND POWER.				
	WEEKLY PER CAPITA—Con.					WEEKLY PER CAPITA.	
	Furniture and Upholstery.	Crockery, Glassware, etc.	Gross Expenses.	Receipts.	Net Expenses.	1915.	Three Years' Average, 1912-14.
The insane: —							
Worcester Hospital,	$0.0299	$0.0295	$36,496 45	–	$36,496 45	$0.4797	$0.3974
Taunton Hospital,	.0313	.0199	18,546 44	–	18,546 44	.2746	.3301
Northampton Hospital,	.0015	.0125	13,343 68	–	13,343 68	.2718	.7717
Danvers Hospital,	.0227	.0178	33,193 85	$1 45	33,192 40	.4244	.4005
Westborough Hospital,	.0131	.0119	33,120 67	–	33,120 67	.4984	.4965
Boston Hospital, excluding Psychopathic Department,	.0080	.0160	34,513 75	19 72	34,494 03	.4522	.4298
Boston Hospital, including Psychopathic Department,	.0213	.0178	43,036 50	19 72	43,016 78	.5306	.5049
Grafton Hospital,	.0214	.0144	30,670 55	–	30,670 55	.3924	.4608
Medfield Hospital,	.0103	.0192	19,484 24	48 40	19,435 84	.2260	.3715
Foxborough Hospital,	.1003	.0184	7,598 36	38 51	7,559 85	.4660	.6782
Gardner Colony,	.0076	.0141	12,539 68	3 38	12,536 30	.3168	.3474
Totals and averages,	$0.0209	$0.0180	$248,030 42	$111 46	$247,918 96	$0.3883	$0.4048[1]
Miscellaneous: —							
Monson Hospital,	$0.0214	$0.0156	$26,034 86	–	$26,034 86	$0.5088	$0.5775
School for the Feeble-minded at Waltham,	.0061	.0081	17,844 95	$36 85	17,808 10	.2126	.2381
Wrentham School,	.0280	.0165	13,355 03	–	13,355 03	.3903	.3222
Totals and averages,	$0.0152	$0.0120	$57,234 84	$36 85	$57,197 99	$0.3382	$0.3908[2]
Totals and averages, hospitals and miscellaneous,	$0.0197	$0.0167	$305,265 26	$148 31	$305,116 95	$0.3778	$0.4016
Mental Wards, State Infirmary,	–	–	$9,169 89	–	$9,169 89	$0.2487	–
Bridgewater Hospital,	–	–	9,425 81	–	9,425 81	.2232	–
Totals and averages,	–	–	$18,595 70	–	$18,595 70	$0.2351	–
Aggregates,	–	–	$323,860 96	$148 31	$323,712 65	$0.3651	–

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	HEAT, LIGHT AND POWER — CON.								
	COAL.								
	SOFT.		HARD.		BUCKWHEAT AND SCREENINGS.		TOTAL CONSUMPTION WEEKLY PER CAPITA.		
								Cost.	
	Quantity, Long Tons.	Average Price.	Quantity, Long Tons.	Average Price.	Quantity, Long Tons.	Average Price.	Quantity, Long Tons.	1915.	Three Years' Average, 1912-14.
The insane: —									
Worcester Hospital,	7,240	$4 49	425	$7 29	–	–	0.1007	$0.4682	$0.3863
Taunton Hospital,	2,700	4 58	626	7 42	–	–	.0492	.2518	.3069
Northampton Hospital,	2,698	4 25	223	6 29	–	–	.0595	.2620	.2620
Danvers Hospital,	7,174	4 16	314	6 45	–	–	.0957	.4077	.3711
Westborough Hospital,	5,700	4 41	586	6 45	–	–	.0946	.4350	.4946
Boston Hospital, excluding Psychopathic Department,	6,702	4 82	250	6 79	–	–	.0911	.4460	–
Boston Hospital, including Psychopathic Department,	8,295	4 82	279	6 80	–	–	.1058	.5168	.4909
Grafton Hospital,	1,813	4 01	380	6 45	6,657	$2 95	.1132	.3760	.4472
Medfield Hospital,	3,925	4 21	409	6 31	–	–	.0504	.2220	.3570
Foxborough Hospital,	1,506	4 21	132	6 37	–	–	.1010	.4427	.6105
Gardner Colony,	1,033	5 24	521	6 40	272	2 58	.0461	.2389	.2706
Totals and averages,	42,084	$4 44	3,895	$6 69	6,929	$2 94	0.0829	$0.3654	$0.3859[1]
Miscellaneous: —									
Monson Hospital,	3,999	$4 04	893	$7 11	–	–	0.0956	$0.4401	$0.5364
School for the Feeble-minded at Waltham,	3,317	4 09	333	8 84	–	–	.0436	.1971	.2227
Wrentham School,	2,487	4 72	210	6 93	–	–	.0788	.3854	.3155
Totals and averages,	9,803	$4 23	1,436	$7 49	–	–	0.0664	$0.3087	$0.3641
Totals and averages, hospitals and miscellaneous,	51,887	$4 40	5,331	$6 90	6,929	$2 94	0.0794	$0.3535	$0.3810
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–	–	–	–
Totals and averages,	–	–	–	–	–	–	–	–	–
Aggregates,	–	–	–	–	–	–	–	–	–

[1] Excludes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	REPAIRS AND IMPROVEMENTS.							
				WEEKLY PER CAPITA.				
	Gross Expenses.	Receipts.	Net Expenses.	1915.	Three Years' Average, 1912-14.	Plumbing, Steam Fitting and Supplies.	Electrical Work and Supplies.	Paints, Oils, Glass, etc.
The insane: —								
Worcester Hospital,	$20,184 91	$9 89	$20,175 02	$0.2652	$0.1991	$0.0852	$0.0163	$0.0272
Taunton Hospital,	13,506 45	169 89	13,336 56	.1975	.2033	.0581	.0048	.0281
Northampton Hospital,	10,027 68	–	10,027 68	.2043	.2253	.0648	.0161	.0293
Danvers Hospital,	27,703 32	472 91	27,230 41	.3482	.4390	.1097	.0377	.0424
Westborough Hospital,	13,203 08	9 18	13,193 90	.1985	.1872	.0741	.0281	.0179
Boston Hospital, excluding Psychopathic Department,	9,796 63	27 03	9,769 60	.1281	.1804	.0221	.0180	.0255
Boston Hospital, including Psychopathic Department,	11,746 99	27 03	11,719 96	.1445	.2018	.0306	.0206	.0293
Grafton Hospital,	18,575 36	122 50	18,452 86	.2361	.1526	.0580	.0219	.0312
Medfield Hospital,	10,229 68	66 13	10,163 55	.1182	.1624	.0316	.0211	.0167
Foxborough Hospital,	5,249 41	8 30	5,241 11	.3230	.2546	.0445	.0407	.0330
Gardner Colony,	9,925 28	1 62	9,923 66	.2508	.3091	.0575	.0345	.0430
Totals and averages,	$140,352 16	$887 45	$139,464 71	$0.2184	$0.2279[1]	$0.0624	$0.0225	$0.0288
Miscellaneous: —								
Monson Hospital,	$11,137 74	$53 85	$11,083 89	$0.2166	$0.2159	$0.0652	$0.0279	$0.0355
School for the Feeble-minded at Waltham,	12,215 28	38 42	12,176 86	.1454	.1779	.0444	.0029	.0243
Wrentham School,	6,559 20	–	6,559 20	.1917	.2018	.0322	.0145	.0517
Totals and averages,	$29,912 22	$92 27	$29,819 95	$0.1763	$0.2000[2]	$0.0482	$0.0129	$0.0332
Totals and averages, hospitals and miscellaneous,	$170,264 38	$979 72	$169,284 66	$0.2096	$0.2216	$0.0594	$0.0205	$0.0297
Mental Wards, State Infirmary,	$7,476 05	$243 76	$7,232 29	$0.1962	–	–	–	–
Bridgewater Hospital,	3,215 04	10 46	3,204 58	.0759	–	–	–	–
Totals and averages,	$10,691 09	$254 22	$10,436 87	$0.1320	–	–	–	–
Aggregates,	$180,955 47	$1,233 94	$179,721 53	$0.2027	–	–	–	–

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FARM, STABLE AND GROUNDS.						
	Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.			
				1915.	Three Years' Average, 1912-14.	Carriages, Wagons and Repairs.	Hay, Grain, etc.	Fertilizers, Vines, Seeds, etc.
The insane: —								
Worcester Hospital,	$14,520 43	$194 04	$14,326 39	$0.1883	$0.2616	$0.0052	$0.1111	$0 0111
Taunton Hospital,	24,192 58	380 17	23,812 41	.3525	.3653	.0114	.2411	.0259
Northampton Hospital,	17,690 59	772 36	16,918 23	.3446	.3324	.0077	.2144	.0408
Danvers Hospital,	20,989 54	927 51	20,062 03	.2565	.2261	.0003	.1415	.0316
Westborough Hospital,	18,224 42	315 94	17,908 48	.2695	.2201	.0004	.1919	.0231
Boston Hospital, excluding Psychopathic Department,	15,462 54	1,137 00	14,325 54	.1878	.2251	.0059	.0365	.0249
Boston Hospital, including Psychopathic Department,	16,118 04	1,137 00	14,981 04	.1848	.2224	.0055	.0344	0235
Grafton Hospital,	24,338 60	120 37	24,218 23	.3099	.2412	.0708	.1527	.0422
Medfield Hospital,	25,013 06	3,905 19	21,107 87	.2454	.3157	.0046	.2199	.0122
Foxborough Hospital,	6,698 76	47 74	6,651 02	.4099	.4026	.0315	.1642	.0533
Gardner Colony,	20,688 24	517 71	20,170 53	.5097	.4364	.0142	.2256	.1000
Totals and averages,	$188,474 26	$8,318 03	$180,156 23	$0.2822	$0.2918[1]	$0.0142	$0.1634	$0.0308
Miscellaneous: —								
Monson Hospital,	$14,292 .6	$928 99	$13,363 27	$0.2612	$0.2425	$0.0116	$0.1606	$0.0144
School for the Feeble-minded at Waltham,	29,161 22	713 48	28,447 74	.3396	.3703	.0038	.2368	.0361
Wrentham School,	17,840 87	613 39	17,227 48	.5035	.4629	.0152	.1944	.0817
Totals and averages,	$61,294 35	$2,255 86	$59,038 49	$0.3490	$0.3495[2]	$0.0085	$0.2052	$0.0388
Totals and averages, hospitals and miscellaneous,	$249,768 61	$10,573 89	$239,194 72	$0.2962	$0.3049	$0.0130	$0.1721	$0.0325
Mental Wards, State Infirmary,	$5,498 81	$44 11	$5,454 70	$0.1480	-	-	-	-
Bridgewater Hospital,	8,713 58	1,495 07	7,218 51	.1709	-	-	-	-
Totals and averages,	$14,212 39	$1,539 18	$12,673 21	$0.1602	-	-	-	-
Aggregates,	$263,981 00	$12,113 07	$251,867 93	$0.2841	-	-	-	-

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FARM, STABLE AND GROUNDS — Con.		MISCELLANEOUS.						
	WEEKLY PER CAPITA — Con.					WEEKLY PER CAPITA.			
	Cows.	Horses.	Gross Expenses.	Receipts.	Net Expenses.	1915.	Three Years' Average, 1912-14.	Freight, Expressage and Transportation.	Water.
The insane: —									
Worcester Hospital,	–	–	$30,315 78	$53 57	$30,262 21	$0.3978	$0.2913	$0.0169	$0.0799
Taunton Hospital,	–	$0.0048	32,787 74	18 48	32,769 26	.4851	.4097	.0324	.0955
Northampton Hospital,	$0.0027	.0213	14,979 81	128 26	14,851 55	.3026	.2607	.0039	.0599
Danvers Hospital,	.0003	.0035	26,807 70	263 91	26,543 79	.3394	.3108	.0550	.0844
Westborough Hospital,	–	.0083	29,248 34	167 03	29,081 31	.4376	.2911	.0588	.0256
Boston Hospital, excluding Psychopathic Department,	–	.0079	22,365 20	4 50	22,360 70	.2931	.2910	.0023	.0899
Boston Hospital, including Psychopathic Department,	–	.0074	33,333 15	4 50	33,328 65	.4111	3991	.0025	.1029
Grafton Hospital,	–	.0153	20,517 05	158 41	20,358 64	.2605	.2309	.0226	.0164
Medfield Hospital,	–	–	22,495 56	54 91	22,440 65	.2609	.1654	.0387	–
Foxborough Hospital,	.0260	–	9,454 95	–	9,454 95	.5828	.5977	.0403	.0766
Gardner Colony,	.0121	.0053	13,319 90	236 22	13,083 68	.3306	.1958	.0320	.00005
Totals and averages,	$0.0016	$0.0066	$233,259 98	$1,085 29	$232,174 69	$0.3637	$0 2835[1]	$0.0299	$0.0543
Miscellaneous: —									
Monson Hospital,	$0.0151	$0.0271	$17,833 67	$4 65	$17,829 02	$0.3484	$0.3032	$0.0412	$0.0410
School for the Feeble-minded at Waltham,	.0061	.0094	28,925 63	104 14	28,821 49	.3440	.2992	.0991	.0495
Wrentham School,	.0700	.0293	9,040 59	220 50	8,820 09	.2578	.2460	.0232	–
Totals and averages,	$0.0217	$0.0188	$55,799 89	$329 29	$55,470 60	$0.3279	$0.3236[2]	$0.0663	$0.0369
Totals and averages, hospitals and miscellaneous,	$0.0059	$0.0091	$289,059 87	$1,414 58	$287,645 29	$0.3562	$0.2926	$0.0375	$0.0507
Mental Wards, State Infirmary,	–	–	$9,939 56	$78 47	$9,861 09	$0.2675	–	–	–
Bridgewater Hospital,	–	–	8,330 85	726 47	7,604 38	.1801	–	–	–
Totals and averages,	–	–	$18,270 41	$804 94	$17,465 47	$0.2208	–	–	–
Aggregates,	–	–	$307,330 28	$2,219 52	$305,110 76	$0.3441	–	–	–

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	MISCELLANEOUS — Con. WEEKLY PER CAPITA — Con.				TOTAL MAINTENANCE EXPENSES.			
						GROSS WEEKLY PER CAPITA.		
	Funeral Expenses, returning Escaped Patients and printing Annual Report.	Religious Services.	Medicines and Hospital Supplies.	Tobacco.	Gross Expenses.	1915.	Three Years' Average, 1912-14.	Receipts from Sales or Refunds.
The insane: —								
Worcester Hospital,	$0.0092	$0.0162	$0.0507	$0.0174	$372,576 99	$4.8974	$4.7392	$1,192 56
Taunton Hospital,	.0091	.0254	.0379	.0156	321,316 70	4.7569	4.6376	1,172 49
Northampton Hospital,	.0070	.0300	.0222	.0029	207,660 28	4.2304	4.0167	1,655 79
Danvers Hospital,	.0044	.0123	.0330	.0149	367,108 61	4.6940	4.6368	2,048 95
Westborough Hospital,	.0090	.0235	.0343	.0145	341,255 83	5.1351	5.0327	1,125 86
Boston Hospital, excluding Psychopathic Department,	.0053	.0178	.0378	.0048	364,353 33	4.7763	4.8458	2,054 84
Boston Hospital, including Psychopathic Department,	.0067	.0179	.0678	.0046	474,516 71	5.8533	5.7950	2,171 08
Grafton Hospital,	.0100	.0198	.0158	.0128	359,478 83	4.5995	4.4590	870 62
Medfield Hospital,	.0076	.0168	.0545	.0131	384,209 34	4.4671	4.1603	4,474 61
Foxborough Hospital,	.0272	.0842	.0573	.0208	108,794 68	6.7058	6.0186	128 47
Gardner Colony,	.0075	.0246	.0183	.0291	166,664 86	4.2117	4.0515	859 16
Totals and averages,	$0.0083	$0.0216	$0.0399	$0.0135	$3,103,582 83	$4.8615	$4.6445[1]	$15,699 59
Miscellaneous: —								
Monson Hospital,	$0.0082	$0.0310	$0.0586	$0.0133	$249,825 27	$4.8824	$4.7880	$1,433 55
School for the Feeble-minded at Waltham,	.0056	.0178	.0146	.00003	309,833 14	3.6985	3.8307	1,349 47
Wrentham School,	.0062	.0218	.0207	.0050	144,807 42	4.2321	3.9652	890 04
Totals and averages,	$0.0065	$0.0226	$0.0292	$0.0050	$704,465 83	$4.1646	$4.3407[2]	$3,673 06
Totals and averages, hospitals and miscellaneous,	$0.0079	$0.0218	$0.0376	$0.0117	$3,808,048 66	$4.7155	$4.5756	$19,372 65
Mental Wards, State Infirmary,	–	–	–	–	$134,387 55	$3.6452	–	$527 06
Bridgewater Hospital,	–	–	–	–	111,093 86	2.6310	–	2,277 68
Totals and averages,	–	–	–	–	$245,481 41	$3.1037	–	$2,804 74
Aggregates,	–	–	–	–	$4,053,530 07	$4.5717	–	$22,177 39

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 5. — *Expenses for Maintenance, etc.* — Concluded.

INSTITUTIONS.	TOTAL MAINTENANCE EXPENSES — Con.			MAINTENANCE APPROPRIATION.			Deficiencies.	Balance reverting to State Treasury.
	Net Expenses.	NET WEEKLY PER CAPITA. 1915.	NET WEEKLY PER CAPITA. Three Years' Average, 1912-14.	Receipts of 1914.	In Addition to Such Receipts.	Totals.		
The insane: —								
Worcester Hospital,	$371,384 43	$4.8817	$4.6663	$58,134 13	$314,650 17[1]	$372,784 30	-	$207 31
Taunton Hospital,	320,144 21	4.7395	4.6049	37,980 74	285,069 26	323,050 00	-	1,733 30
Northampton Hospital,	206,004 49	4.1966	3.9718	51,584 44	156,215 56	207,800 00	-	139 72
Danvers Hospital,	365,059 66	4.6678	4.5912	61,451 70	310,018 30	371,470 00	-	4,361 39
Westborough Hospital,	340,129 97	5.1181	4.9940	82,937 99	259,714 68[2]	342,652 67	-	1,396 84
Boston Hospital, excluding Psychopathic Department,	362,298 49	4.7493	4.8117	-	-	-	-	-
Boston Hospital, including Psychopathic Department,	472,345 63	5.8265	5.7631	42,908 38	431,793 46[3]	474,701 84	-	185 13
Grafton Hospital,	358,608 21	4.5884	4.4261	10,955 83	349,344 17	360,300 00	-	821 17
Medfield Hospital,	379,734 73	4.4151	4.1310	12,492 14	394,417 86	406,910 00	-	22,700 66
Foxborough Hospital,	108,666 21	6.6978	5.9177	5,337 63	103,457 38[4]	108,795 01	-	33
Gardner Colony,	165,805 70	4.1900	3.9926	2,400 64	164,528 61[5]	166,929 25	-	264 39
Totals and averages,	$3,087,883 24	$4.8369	$4.6022[6]	$366,183 62	$2,769,209 45	$3,135,393 07	-	$31,810 24
Miscellaneous: —								
Monson Hospital,	$248,391 72	$4.8544	$4.7337	$13,699 71	$536,308 37[7]	$250,008 08	-	$182 81
School for the Feeble-minded at Waltham,	308,483 67	3.6824	3.8023	19,333 26	291,933 62[8]	311,266 88	-	1,433 74
Wrentham School,	143,917 38	4.2061	3.9545	1,311 52	164,739 33[9]	166,050 85	-	21,243 43
Totals and averages,	$700,792 77	$4.1429	$4.3003[10]	$34,344 49	$692,981 32	$727,325 81	-	$22,859 98
Totals and averages, hospitals and miscellaneous,	$3,788,676 01	$4.6915	$4.5337	$400,528 11	$3,462,190 77	$3,862,718 88	-	$54,670 22
Mental Wards, State Infirmary,	$133,860 49	$3.6309	-	$1,120 91	$133,267 70	$134,388 61	-	$1 06
Bridgewater Hospital,	108,816 18	2.5771	-	2,327 33	108,770 21	111,097 54	-	3 68
Totals and averages,	$242,676 67	$3.0683	-	$3,448 24	$242,037 91	$245,486 15	-	$4 74
Aggregates,	$4,031,352 68	$4.5467	-	$403,976 35	$3,704,228 68	$4,108,205 03	-	$54,674 96

[1] Includes $534.30 allowance for coal.
[2] Includes $202.67 brought over from 1914.
[3] Includes $245.84 brought over from 1914.
[4] Includes $257.01 brought over from 1914.
[5] Includes $229.25, deficiency of 1914.
[6] Excludes Foxborough Hospital.
[7] Includes $20.08 brought over from 1914.
[8] Includes $55.39, deficiency of 1914, and $820.89 for sewage.
[9] Includes $33.85 brought forward from 1914.
[10] Includes Foxborough Hospital.

TABLE 6.—*Whole Weekly Per Capita Cost of Support of a Patient in the Institutions for the Insane, Feeble-minded, Epileptic and Inebriate for the Fiscal Year ending Nov. 30, 1915.*

INSTITUTIONS.	Average Number of Patients, 1915.	Total Real and Personal Property.	Per Capita Valuation.	Weekly Per Capita Cost.					
				Interest 3.54 Per Cent.	Depreciation.	Maintenance, exclusive of Repairs and Improvements.	Gross Cost.	Receipts.	Net Cost.
The insane: —									
Worcester Hospital,	1,463	$2,206,572 48	$1,508 25	$1 03	$0 51	$4 39	$5 93	$0 70	$5 23
Taunton Hospital,	1,299	911,078 22	701 37	48	32	4 43	5 23	58	4 65
Northampton Hospital,	944	1,061,068 64	1,124 01	76	36	3 87	4 99	1 08	3 91
Danvers Hospital,	1,504	1,876,788 19	1,247 86	85	66	4 03	5 54	82	4 72
Westborough Hospital,	1,278	1,038,444 83	812 55	55	32	4 82	5 69	1 12	4 57
Boston Hospital, including Psychopathic Department,	1,559	2,954,586 20	1,895 18	1 29	25	5 60	7 14	54	6 60
Grafton Hospital,	1,503	1,901,064 83	1,264 85	86	39	4 21	5 46	18	5 28
Medfield Hospital,	1,654	1,703,908 33	1,030 17	70	26	4 21	5 17	15	5 02
Foxborough Hospital,	312	342,038 58	1,096 28	75	66	6 05	7 46	16	7 30
Gardner Colony,	761	667,825 52	877 56	60	41	3 80	4 81	06	4 75
Totals and averages,	12,277	$14,663,375 82	$1,194 38	$0 81	$0 39	$4 47	$5 67	$0 56	$5 11
Miscellaneous: —									
Monson Hospital,	984	$960,573 56	$976 19	$0 66	$0 33	$4 55	$5 54	$0 29	$5 25
School for the Feeble-minded at Waltham,	1,611	1,065,862 34	661 61	45	31	3 39	4 15	18	3 97
Wrentham School,	658	921,026 12	1,399 74	95	37	3 87	5 19	07	5 12
Totals and averages,	3,253	$2,947,462 02	$906 07	$0 62	$0 33	$3 84	$4 79	$0 19	$4 60
Totals and averages, hospitals and miscellaneous,	15,530	$17,610,837 84	$1,133 99	$0 77	$0 38	$4 33	$5 48	$0 49	$4 99

TABLE 7. — *Receipts and Expenses on Account of Institutions for the Insane, Feeble-minded, Epileptic and Inebriate for the Fiscal Year ending Nov. 30, 1915.*

	Expenses.				Total Receipts.	Net Expenses.
	Increasing Value of Plant.	Which counterbalance Depreciation.	Maintenance, exclusive of Repairs and Improvements.	Total Expenses.		
State Board of Insanity: —						
Office, traveling and contingent expenses, salaries and printing annual report,	–	–	$67,568 89	$67,568 89	$219 53[1]	$67,349 36
Transportation and deportation of patients, etc.,	–	–	7,374 26	7,374 26	3 50	7,370 76
Pathological investigation,	–	–	2,458 95	2,458 95	2 50	2,456 45
Totals,	–	–	$77,402 10	$77,402 10	$225 53	$77,176 57
The insane: —						
Worcester Hospital,	$285 00	$38,772 96	$333,729 68	$372,787 64	$53,170 47	$319,617 17
Taunton Hospital,	896 99	21,948 45	299,356 17	322,201 61	39,310 80	282,890 81
Northampton Hospital,	12,631 00	17,741 87	189,794 14	220,167 01	52,907 87	167,259 14
Danvers Hospital,	–	52,019 07	314,907 41	366,926 48	63,973 95	302,952 53
Westborough Hospital,	12,853 39	20,972 19	310,475 36	344,300 94	74,283 65	270,017 29
Boston Hospital, including Psychopathic Department,	9,489 78	20,193 14	454,323 57	484,006 49	43,822 82	440,183 67
Grafton Hospital,	67,335 43	30,606 04	328,789 25	426,730 72	13,796 31	412,934 41
Medfield Hospital,	3,078 42	22,410 26	361,719 33	387,208 01	13,390 68	373,817 33
Foxborough Hospital,	1,307 29	10,663 62	98,129 32	110,100 23	2,543 23	107,557 00
Gardner Colony,	9,828 28	16,351 54	150,313 32	176,493 14	2,537 80	173,955 34
Totals,	$117,705 58	$251,679 14	$2,841,537 55	$3,210,922 27	$359,737 58	$2,851,184 69

[1] Includes $69.20 bank interest and $150 from licenses.

TABLE 7. — *Receipts and Expenses, etc.* — Concluded.

	Expenses.				Total Receipts.	Net Expenses.
	Increasing Value of Plant.	Which counterbalance Depreciation.	Maintenance, exclusive of Repairs and Improvements.	Total Expenses.		
Miscellaneous: —						
Mental Wards, State Infirmary,	–	$12,658 98	$121,728 57	$134,387 55	$1,231 94	$133,155 61
Bridgewater Hospital (insane),	–	4,647 05	106,446 81	111,093 86	3,383 14	107,710 72
Monson Hospital (insane),	$12,511 70	5,890 14	81,954 92	100,356 76	5,247 20	95,109 56
Totals,	$12,511 70	$23,196 17	$310,130 30	$345,838 17	$9,862 28	$335,975 89
Totals, institutions for the insane,	$130,217 28	$274,875 31	$3,151,667 85	$3,556,760 44	$369,599 86	$3,187,160 58
Family care,	–	–	16,950 51	16,950 51	859 78	16,090 73
Totals for the insane,	$130,217 28	$274,875 31	$3,168,618 36	$3,573,710 95	$370,459 64	$3,203,251 31
Feeble-minded: —						
School for the Feeble-minded at Waltham,	$3,413 79	$26,109 03	$283,724 11	$313,246 93	$14,759 07	$298,487 86
Wrentham School,	131,903 89	12,508 49	132,298 93	276,711 31	2,520 58	274,190 73
Totals for the feeble-minded,	$135,317 68	$38,617 52	$416,023 04	$589,958 24	$17,279 65	$572,678 59
Epileptic: —						
Monson Hospital (sane),	$23,070 70	$10,861 00	$151,119 21	$185,050 91	$9,675 47	$175,375 44
Hospital Cottages for Children,	–	–	9,427 45	9,427 45	–	9,427 45
Totals for epileptics,	$23,070 70	$10,861 00	$160,546 66	$194,478 36	$9,675 47	$184,802 89
Inebriates: —						
Insane institutions,	–	–	$10,366 14	$10,366 14	–	$10,366 14
Aggregates,	$288,605 66	$324,353 83	$3,832,956 30	$4,445,915 79	$397,640 29	$4,048,275 50

TABLE 8. — *General Statement as to Special Appropriations.*

INSTITUTIONS.	Balances brought forward from Previous Years.	New Appropriations.	Total of Live Appropriations.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1915.				
				Land.	For Construction.			
					Buildings for patients.		Buildings for nurses.	
					New and Additions.	Repairs.	New and Additions.	Repairs.
The insane: —								
Worcester Hospital,	$912 21	–	$912 21	–	$285 00	–	–	–
Taunton Hospital,	899 49	–	899 49	–	682 98[1]	–	–	–
Northampton Hospital,	12,645 37	–	12,645 37	–	7,113 43	–	–	–
Danvers Hospital,	–	–	–	–	–	–	–	–
Westborough Hospital,	18,810 36	–	18,810 36	–	559 09	–	–	–
Boston Hospital, including Psychopathic Department,	16,928 25	$1,258 24[2]	18,186 49	$6,037 02	1,942 48	–	–	–
Grafton Hospital,	107,584 01	19,000 00	126,584 01	–	23,799 97	–	$2,915 15	–
Medfield Hospital,	–	25,000 00	25,000 00	–	–	–	–	–
Foxborough Hospital,	–	49,000 00	49,000 00	–	1,307 29	–	–	–
Gardner Colony,	605 53	14,000 00	14,605 53	7,181 00	–	–	–	–
Metropolitan Hospital,	100,000 00	15,000 00	115,000 00	70,600 16	–	–	–	–
Totals,	$258,385 22	$123,258 24	$381,643 46	$83,818 18	$35,690 24	–	$2,915 15	–
Miscellaneous: —								
Monson Hospital,	$35,231 34	$4,000 00	$39,231 34	–	$25,863 61	–	–	–
Massachusetts School for Feeble-minded at Waltham,	3,500 00	3,500 00	7,000 00	–	1,787 13	–	–	–
Wrentham School,	144,873 07	75,136 30[3]	220,009 37	–	104,391 92	–	$9,649 22	–
School for Feeble-minded in western part of State,	–	50,000 00	50,000 00	–	–	–	–	–
Totals,	$183,604 41	$132,636 30	$316,240 71	–	$132,042 66	–	$9,649 22	–
Totals, hospitals and miscellaneous,	$441,989 63	$255,894 54	$697,884 17	$83,818 18	$167,732 90	–	$12,564 37	–
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–	–	–
Totals,	–	–	–	–	–	–	–	–
Aggregates,	$441,989 63	$255,894 54	$697,884 17	$83,818 18	$167,732 90	–	$12,564 37	–

[1] For patients and nurses.

[2] Transferred from extraordinary expenses.

[3] Includes transfer of $36.30.

TABLE 8. — *General Statement as to Special Appropriations* — Continued.

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1915 — CON.							
	FOR CONSTRUCTION — CON.						FOR FURNISHING AND EQUIPPING.	
	BUILDINGS FOR FARM, STABLE AND GROUNDS.		ALL OTHER BUILDINGS.		TOTAL BUILDINGS.		FOR PATIENTS.	
	New and Additions.	Repairs.	New and Additions.	Repairs.	New and Additions.	Repairs.	First Furnishing and Equipping.	Repairs and Renewals.
The insane: —								
Worcester Hospital,	–	–	–	–	$285 00	–	–	–
Taunton Hospital,	–	–	–	–	682 98	–	$214 01	–
Northampton Hospital,	$4,603 08	–	$914 49	–	12,631 00	–	–	–
Danvers Hospital,	–	–	–	–	–	–	–	–
Westborough Hospital,	–	–	–	–	559 09	–	–	–
Boston Hospital, including Psychopathic Department,	–	–	573 37	–	2,515 85	–	771 75	–
Grafton Hospital,	–	–	976 56	–	27,691 68	–	–	–
Medfield Hospital,	–	–	3,078 42	–	3,078 42	–	–	–
Foxborough Hospital,	–	–	–	–	1,307 29	–	–	–
Gardner Colony,	418 42	–	–	–	418 42	–	–	–
Metropolitan Hospital,	–	–	–	–	–	–	–	–
Totals,	$5,021 50	–	$5,542 84	–	$49,169 73	–	$985 76	–
Miscellaneous: —								
Monson Hospital,	–	–	–	–	$25,863 61	–	$5,424 59	–
Massachusetts School for Feeble-minded at Waltham,	$1,626 66	–	–	–	3,413 79	–	–	–
Wrentham School,	2,487 81	–	$2,669 45	–	119,198 40	–	9,283 73	–
School for Feeble-minded in western part of State,	–	–	–	–	–	–	–	–
Totals,	$4,114 47	–	$2,669 45	–	$148,475 80	–	$14,708 32	–
Totals, hospitals and miscellaneous,	$9,135 97	–	$8,212 29	–	$197,645 53	–	$15,694 08	–
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–	–	–
Totals,	–	–	–	–	–	–	–	–
Aggregates,	$9,135 97	–	$8,212 29	–	$197,645 53	–	$15,694 08	–

TABLE 8. — *General Statement as to Special Appropriations* — Continued.

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1915 — CON.					
	FOR FURNISHING AND EQUIPPING — CON.					
	FOR NURSES.		FOR FARM, STABLE AND GROUNDS.		FOR ALL OTHER PURPOSES.	
	First Furnishing and Equipping.	Repairs and Renewals.	First Furnishing and Equipping.	Repairs and Renewals.	First Furnishing and Equipping.	Repairs and Renewals.
The insane: —						
Worcester Hospital,	–	–	–	–	–	–
Taunton Hospital,	–	–	–	–	–	–
Northampton Hospital,	–	–	–	–	–	–
Danvers Hospital,	–	–	–	–	–	–
Westborough Hospital,	–	–	–	–	–	–
Boston Hospital, including Psychopathic Department,	–	–	–	–	$140 56	–
Grafton Hospital,	–	–	–	–	–	–
Medfield Hospital,	–	–	–	–	–	–
Foxborough Hospital,	–	–	–	–	–	–
Gardner Colony,	–	–	–	–	–	–
Metropolitan Hospital,	–	–	–	–	–	–
Totals,	–	–	–	–	$140 56	–
Miscellaneous: —						
Monson Hospital,	–	–	–	–	–	–
Massachusetts School for Feeble-minded at Waltham,	–	–	–	–	–	–
Wrentham School,	$43 80	–	–	–	$1,298 42	–
School for Feeble-minded in western part of State,	–	–	–	–	–	–
Totals,	$43 80	–	–	–	$1,298 42	–
Totals, hospitals and miscellaneous,	$43 80	–	–	–	$1,438 98	–
Mental Wards, State Infirmary,	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–
Totals,	–	–	–	–	–	–
Aggregates,	$43 80	–	–	–	$1,438 98	–

TABLE 8. — *General Statement as to Special Appropriations* — Continued.

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1915 — CON.							
	FOR FURNISHING AND EQUIPPING — CON.		FOR BETTERMENTS.					
	TOTALS.		WATER SUPPLY, EXCLUSIVE OF PLUMBING IN BUILDINGS.		SEWERAGE, EXCLUSIVE OF PLUMBING IN BUILDINGS.		HEATING, EXCLUSIVE OF APPURTENANCES IN BUILDINGS.	
	First Furnishing and Equipping.	Repairs and Renewals.	Adding to Original Value.	Repairs and Renewals.	Adding to Original Value.	Repairs and Renewals.	Adding to Original Value.	Repairs and Renewals.
The insane: —								
Worcester Hospital,	–	–	–	–	–	–	–	–
Taunton Hospital,	$214 01	–	–	–	–	–	–	–
Northampton Hospital,	–	–	–	–	–	–	–	–
Danvers Hospital,	–	–	–	–	–	–	–	–
Westborough Hospital,	–	–	–	–	–	–	$12,294 30	–
Boston Hospital, including Psychopathic Department,	912 31	–	$24 60 [1]	–	–	–	–	–
Grafton Hospital,	–	–	7,126 58	–	$9,510 20	–	3,169 51	–
Medfield Hospital,	–	–	–	–	–	–	–	–
Foxborough Hospital,	–	–	–	–	–	–	–	–
Gardner Colony,	–	–	–	–	2,228 86	–	–	–
Metropolitan Hospital,	–	–	–	–	–	–	–	–
Totals,	$1,126 32	–	$7,151 18	–	$11,739 06	–	$15,463 81	–
Miscellaneous: —								
Monson Hospital,	$5,424 59	–	$668 03	–	–	–	$1,919 15	–
Massachusetts School for Feeble-minded at Waltham,	–	–	–	–	–	–	–	–
Wrentham School,	10,625 95	–	–	–	–	–	2,079 54	–
School for Feeble-minded in western part of State,	–	–	–	–	–	–	–	–
Totals,	$16,050 54	–	$668 03	–	–	–	$3,998 69	–
Totals, hospitals and miscellaneous,	$17,176 86	–	$7,819 21	–	$11,739 06	–	$19,462 50	–
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–	–	–
Totals,	–	–	–	–	–	–	–	–
Aggregates,	$17,176 86	–	$7,819 21	–	$11,739 06	–	$19,462 50	–

[1] Includes sewage.

TABLE 8. — *General Statement as to Special Appropriations* — Concluded.

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1915 — CON.					Total Expenditures to Date.	Balance at End of Current Fiscal Year.	Reverted Balances.
	MISCELLANEOUS.		TOTAL EXPENDITURES.					
	Adding to Original Value.	Repairs and Renewals.	Adding to Original Value.	Repairs and Renewals.	Total Expenditures during Fiscal Year.			
The insane: —								
Worcester Hospital,	–	–	$285 00	–	$285 00	$83,372 79	–	$627 21
Taunton Hospital,	–	–	896 99	–	896 99	61,997 50	–	2 50
Northampton Hospital,	–	–	12,631 00	–	12,631 00	20,985 63	–	14 37
Danvers Hospital,	–	–	–	–	–	–	–	–
Westborough Hospital,	–	–	12,853 39	–	12,853 39	79,043 03	$5,019 07	937 90
Boston Hospital, including Psychopathic Department,	–	–	9,489 78	–	9,489 78	999,561 53	1,154 76	7,541 95
Grafton Hospital,	$19,837 46	–	67,335 43	–	67,335 43	590,751 42	59,246 67	1 91
Medfield Hospital,	–	–	3,078 42	–	3,078 42	3,078 42	21,921 58	–
Foxborough Hospital,	–	–	1,307 29	–	1,307 29	1,307 29	47,692 71	–
Gardner Colony,	–	–	9,828 28	–	9,828 28	12,722 75	4,771 14	6 11
Metropolitan Hospital,	–	–	70,600 16	–	70,600 16	70,600 16	44,399 84	–
Totals,	$19,837 46	–	$188,305 74	–	$188,305 74	$1,923,420 52	$184,205 77	$9,131 95
Miscellaneous: —								
Monson Hospital,	$1,707 02	–	$35,582 40	–	$35,582 40	$138,751 06	$3,331 97	$316 97
Massachusetts School for Feeble-minded at Waltham,	–	–	3,413 79	–	3,413 79	3,413 79	3,586 21	–
Wrentham School,	–	–	131,903 89	–	131,903 89	366,627 89	88,082 31	23 17
School for Feeble-minded in western part of State,	–	–	–	–	–	–	50,000 00	–
Totals,	$1,707 02	–	$170,900 08	–	$170,900 08	$508,792 74	$145,000 49	$340 14
Totals, hospitals and miscellaneous,	$21,544 48	–	$359,205 82	–	$359,205 82	$2,432,213 26	$329,206 26	$9,472 09
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–
Bridgewater Hospital,	–	–	–	–	–	–	–	–
Totals,	–	–	–	–	–	–	–	–
Aggregates,	$21,544 48	–	$359,205 82	–	$359,205 82	$2,432,213 26	$329,206 26	$9,472 09

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments.*

INSTITUTIONS.	MEDICAL SERVICE.							WARD SERVICE.			
	Full Roster.	Average Number Persons.		Average Monthly Compensation.		Average Weekly Per Capita Cost.		Full Roster, Males.	Average Number Persons, Males.		Full Roster, Females.
		In Service, 1915.[1]	Average Three Years, 1912–14.[2]	1915.[1]	Average Three Years, 1912–14.[2]	1915.[1]	Average Three Years, 1912–14.[2]		In Service, 1915.	Average Three Years, 1912–14.	
The insane: —											
Worcester Hospital,	19	14.68	14.53	$84 57	$95 51	$0.1958	$0.2345	105	91.00	85.83	129
Taunton Hospital,	17	14.83	13.14	68 75	83 86	.1811	.2239	72	82.73	71.85	72
Northampton Hospital,	7	5.57	6.93	101 36	101 67	.1380	.1793	54	47.15	39.82	54
Danvers Hospital,	21	19.46	15.05	59 22	81 13	.1768	.1907	73	69.60	67.85	111
Westborough Hospital,	14	15.23	18.07	78 81	79 84	.2167	.2630	94	93.91	82.72	119
Boston Hospital, including Psychopathic Department,	42	37.98	31.24	73 10	88 23	.4110	.4626	86	88.33	76.04	173
Grafton Hospital,	10	9.35	9.39	71 69	95 00	.1029	.1627	83	72.76	65.31	91
Medfield Hospital,	9	6.89	6.26	88 66	112 28	.0852	.0962	80	76.80	71.90	140
Foxborough Hospital,	7	4.62	4.68	65 62	120 53	.2243	.3863	24	23.71	20.58	15
Gardner Colony,	5	3.08	3.17	94 76	134 81	.0885	.1433	45	43.98	41.99	22
Totals and averages,	151	131 69	117.78[3]	$74 65	$88 68[3]	$0.1848	$0.2175[3]	716	689.97	603.31[3]	926
Miscellaneous: —											
Monson Hospital,	11	8.16	7.21	$102 70	$116 87	$0.1965	$0.2103	60	44.89	41.99	71
School for the Feeble-minded at Waltham,	7	4.39	5.98	122 59	161 70	.0771	.1493	26	24.12	24.11	165
Wrentham School,	4	2.73	2.55	113 04	182 95	.1082	.2280	5	4.32	3.11	67
Totals and averages,	22	15.28	20.42[4]	$110 26	$138 34[4]	$0.1195	$0.2028[4]	91	73.33	89.79[4]	303
Totals and averages, hospitals and miscellaneous,	173	146.97	138.20	$78 35	$96 07	$0.1711	$0.2142	807	763.30	693.10	1,229

[1] Excluding superintendent. [2] Including Superintendent. [3] Excludes Foxborough Hospital. [4] Includes Foxborough Hospital.

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.	WARD SERVICE — CON.											Number Persons boarded out, 1915.
	AVERAGE NUMBER PERSONS, FEMALES.		Full Roster, Totals.	AVERAGE NUMBER PERSONS, TOTALS.		NUMBER OF PATIENTS TO ONE NURSE.						
						MALES.		FEMALES.		TOTALS.		
	In Service, 1915.	Average Three Years, 1912-14.		In Service, 1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	
The insane: —												
Worcester Hospital,	113.11	102.54	234	204.11	188.37	7.96	7.90	6.20	6.72	6.98	7.26	37.88
Taunton Hospital,	79.62	71.16	144	162.35	143.01	8.10	8.46	7.12	7.36	7.62	7.91	61.58
Northampton Hospital,	44.05	41.41	108	91.20	81.23	10.15	11.77	10.02	10.72	10.09	11.18	23.43
Danvers Hospital,	101.20	86.94	184	170.80	154.79	7.92	9.00	9.34	9.78	8.76	9.44	7.86
Westborough Hospital,	113.78	107.02	213	207.69	189.74	5.65	6.24	6.11	6.68	5.90	6.49	51.46
Boston Hospital, including Psychopathic Department,	176.06	136.63	259	264.39	212.67	5.69	5.99	5.96	5.89	5.87	5.93	7.28
Grafton Hospital,	85.88	73.19	174	158.64	138.50	9.36	9.08	9.31	9.22	9.33	9.15	22.04
Medfield Hospital,	136.09	121.22	220	212.89	193.12	8.40	9.81	7.20	8.10	7.63	8.73	28.71
Foxborough Hospital,	13.90	1.27	39	37.61	21.85	10.28	16.37	4.84	.47	8.27	15.49	1.00
Gardner Colony,	18.02	18.79	67	62.00	60.78	10.52	10.45	15.36	13.37	11.92	11.34	22.08
Totals and averages,	881.71	758.90[1]	1,642	1,571.68	1,362.21[1]	7.96	8.39[1]	7.40	7.81[1]	7.64	8.07[1]	263.32
Miscellaneous: —												
Monson Hospital,	57.09	50.10	131	101.98	92.09	8.89	8.91	10.24	10.71	9.65	9.89	-
School for the Feeble-minded at Waltham,	159.84	150.65	191	183.96	174.76	8.79	6.56	8.75	8.89	8.76	8.56	-
Wrentham School,	62.91	40.72	72	67.23	43.83	21.56	24.07	8.98	10.02	9.79	11.06	-
Totals and averages,	279.84	242.74[2]	394	353.17	332.53[2]	9.60	10.50[2]	9.11	9.37[2]	9.21	9.69[2]	-
Totals and averages, hospitals and miscellaneous,	1,161.55	1,001.64	2,036	1,924.85	1,694.74	8.12	8.67	7.81	8.19	7.93	8.39	263.32

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.	WARD SERVICE — CON.								GENERAL ADMINISTRATION.		
	AVERAGE MONTHLY COMPENSATION.						AVERAGE WEEKLY PER CAPITA COST.		Full Roster.	AVERAGE NUMBER PERSONS.	
	MALES.		FEMALES.		TOTALS.						
	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.		In Service, 1915.[1]	Average Three Years, 1912-14.[2]
The insane: —											
Worcester Hospital,	$27 47	$26 03	$24 48	$23 31	$25 81	$24 55	$0.8311	$0.7808	103	100.05	87.70
Taunton Hospital,	29 88	29 87	24 19	24 62	27 14	27 26	.7828	.7970	106	98.85	90.58
Northampton Hospital,	33 45	32 37	27 95	28 14	30 79	30 23	.6865	.6259	49	53.01	47.71
Danvers Hospital,	31 43	30 06	25 38	25 45	27 85	27 46	.7298	.6732	90	83.54	76.37
Westborough Hospital,	30 90	29 23	25 51	23 84	27 66	26 18	1.0374	.9336	100	94.58	94.68
Boston Hospital, including Psychopathic Department,	32 34	30 85	27 86	26 64	29 39	28 15	1.1502	1.0987	116	124.86	97.29
Grafton Hospital,	28 40	27 12	25 61	24 26	26 89	25 61	.6549	.6464	117	116.27	85.71
Medfield Hospital,	36 16	31 14	30 46	26 03	32 52	27 93	.9659	.7404	129	119.85	118.17
Foxborough Hospital,	29 81	33 11	24 09	25 77	27 70	32 69	.7704	.4962	40	38.65	37.56
Gardner Colony,	30 82	29 43	24 24	21 80	28 90	27 07	.5435	.5511	53	53.30	47.46
Totals and averages,	$31 03	$29 36[3]	$26 50	$25 10[3]	$28 49	$26 99[3]	$0.8417	$0.7724[3]	903	882.96	745.67[3]
Miscellaneous: —											
Monson Hospital,	$43 27	$38 89	$36 59	$30 19	$39 53	$34 16	$0.9454	$0.7975	72	68.58	61.10
School for the Feeble-minded at Waltham,	34 80	33 48	26 03	26 48	27 18	27 44	.7164	.7396	59	57.12	54.74
Wrentham School,	47 78	39 41	27 60	28 85	28 89	29 63	.6813	.6220	24	25.73	18.13
Totals and averages,	$40 75	$36 14[4]	$28 54	$27 56[4]	$31 07	$29 87[4]	$0.7786	$0.7133[4]	155	151.43	171.53[4]
Totals and averages, hospitals and miscellaneous,	$31 96	$30 24	$26 99	$25 70	$28 96	$27 55	$0.8284	$0.7591	1,058	1,034.39	917.20

[1] Including superintendent. [2] Excluding superintendent. [3] Excludes Foxborough Hospital. [4] Includes Foxborough Hospital.

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.	GENERAL ADMINISTRATION — Con.				REPAIRS AND IMPROVEMENTS.						
	AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.		Full Roster.	AVERAGE NUMBER PERSONS.		AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.	
	1915.[1]	Average Three Years, 1912–14.[2]	1915.[1]	Average Three Years, 1912–14.[2]		In Service, 1915.	Average Three Years, 1912–14.	1915.	Average Three Years, 1912–14.	1915.	Average Three Years, 1912–14.
The insane: —											
Worcester Hospital,	$33 92	$31 33	$0.5353	$0.4634	20	17.26	16.21	$89 74	$91 92	$0.2443	$0.2512
Taunton Hospital,	37 06	33 61	.6508	.6220	10	8.20	7.96	85 79	78 12	.1250	.1256
Northampton Hospital,	40 10	34 65	.5196	.4215	9	7.98	6.59	80 56	81 28	.1571	.1365
Danvers Hospital,	46 74	42 67	.5991	.5162	25	21.26	28.09	95 31	90 86	.3109	.4048
Westborough Hospital,	44 46	41 98	.7593	.7468	9	6.30	6.34	102 60	90 64	.1169	.1079
Boston Hospital, including Psychopathic Department,	45 88	46 44	.8481	.8252	11	9.01	8.92	78 12	80 39	.1042	.1332
Grafton Hospital,	35 37	38 77	.6314	.5810	7	11.01	8.75	91 06	88 25	.1539	.1412
Medfield Hospital,	35 91	33 46	.6005	.5416	16	12.65	13.07	80 24	77 71	.1416	.1392
Foxborough Hospital,	49 43	39 25	1.4130	1.0277	9	7.95	6.31	56 75	45 50	.3337	.2004
Gardner Colony,	40 89	35 13	.6610	.5587	9	6.12	7.58	87 50	81 17	.1624	.2062
Totals and averages,	$40 24	$37 41[3]	$0.6678	$0.5877[3]	125	107.74	103.51[3]	$86 11	$85 88[3]	$0.1744	$0.1870[3]
Miscellaneous: —.											
Monson Hospital,	$39 29	$37 08	$0.6320	$0.5744	7	5.80	6.02	$80 65	$91 81	$0.1097	$0.1396
School for the Feeble-minded at Waltham,	47 53	38 29	.3889	.3235	10	8.84	8.66	130 97	127 27	.1659	.1702
Wrentham School,	53 53	47 00	.4830	.4303	5	4.80	2.78	103 29	104 77	.1739	.1477
Totals and averages,	$44 82	$38 99[4]	$0.4815	$0.4808[4]	22	19.44	23.77[4]	$109 12	$93 88[4]	$0.1505	$0.1605[4]
Totals and averages, hospitals and miscellaneous,	$40 91	$37 81	$0.6288	$0.5635	147	127.18	127.28	$89 63	$87 38	$0.1694	$0.1810

[1] Including superintendent. [2] Excluding superintendent. [3] Excludes Foxborough Hospital. [4] Includes Foxborough Hospital.

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.	Full Roster.	FARM, STABLE AND GROUNDS.					
		AVERAGE NUMBER OF PERSONS.		AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.	
		In Service, 1915.	Average Three Years, 1912–14.	1915.	Average Three Years, 1912–14.	1915.	Average Three Years, 1912–14.
The insane: —							
Worcester Hospital,	38	33.37	43.32	$34 21	$31 60	$0.1801	$0.2309
Taunton Hospital,	22	19.85	19.77	42 46	41 00	.1497	.1656
Northampton Hospital,	23	22.25	21.00	37 72	37 97	.2052	.2031
Danvers Hospital,	22	22.24	23.00	42 90	44 86	.1464	.1634
Westborough Hospital,	30	27.89	29.29	32 88	33 13	.1656	.1823
Boston Hospital, including Psychopathic Department,	26	25.62	23.95	35 61	34 68	.1350	.1546
Grafton Hospital,	60	57.29	50.03	33 59	33 37	.2955	.3033
Medfield Hospital,	35	34.09	34.57	32 46	32 03	.1544	.1517
Foxborough Hospital,	12	10.36	9.86	36 49	33 74	.2796	.2304
Gardner Colony,	13	14.27	9.49	50 18	51 21	.2171	.1627
Totals and averages,	281	267.23	254.42[1]	$36 42	$35 66[1]	$0.1829	$0.1906[1]
Miscellaneous: —							
Monson Hospital,	23	22.96	22.59	$43 15	$41 50	$0.2323	$0.2381
School for the Feeble-minded at Waltham,	37	35.69	34.46	39 85	36 20	.2037	.1924
Wrentham School,	10	10.72	8.50	46 36	47 14	.1743	.2040
Totals and averages,	70	69.37	75.41[2]	$41 95	$38 71[2]	$0.2064	$0.2099[2]
Totals and averages, hospitals and miscellaneous,	351	336.60	329.83	$37 56	$36 36	$0.1879	$0.1949

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

TABLE 9. — *Comparative Analysis of Pay Roll, by Departments* — Concluded.

INSTITUTIONS.	Full Roster.	All Persons Employed.							
		Average number of persons.		Number of persons to one employee.		Average monthly compensation.		Average weekly per capita cost.	
		In Service, 1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.	1915.	Average Three Years, 1912-14.
The insane: —									
Worcester Hospital,	414	369.47	350.13	3.86	3.91	$34 09	$33 17	$1.9866	$1.9608
Taunton Hospital,	299	304.08	274.46	4.07	4.12	34 97	34 47	1.8894	1.9341
Northampton Hospital,	196	180.01	163.46	5.11	5.55	38 78	37 59	1.7064	1.5663
Danvers Hospital,	342	317.30	297.30	4.72	4.91	40 32	41 41	1.9630	1.9483
Westborough Hospital,	366	351.69	338.12	3.49	3.64	36 15	35 17	2.2959	2.2336
Boston Hospital, including Psychopathic Department,	454	461.86	374.07	3.36	3.37	38 74	39 00	2.6485	2.6743
Grafton Hospital,	368	352.56	292.38	4.20	4.36	33 97	34 59	1.8386	1.8346
Medfield Hospital,	409	386.37	365.19	4.20	4.62	36 13	33 34	1.9476	1.6691
Foxborough Hospital,	107	99.19	80.26	3.14	4.21	41 18	42 06	3.0210	2.3410
Gardner Colony,	147	138.77	128.48	5.33	5.37	39 74	37 51	1.6725	1.6220
Totals and averages,	3,102	2,961.30	2,583.59[1]	4.06	4.26[1]	$36 86	$36 03[1]	$2.0516	$1.9552[1]
Miscellaneous: —									
Monson Hospital,	244	207.48	189.01	4.04	4.82	$43 49	$40 92	$2.1160	$1 9599
School for the Feeble-minded at Waltham,	304	290.00	278.60	5.55	5.37	37 36	36 65	1.5520	1.5750
Wrentham School,	115	111.21	75.79	5.92	6.18	41 55	43 73	1.6207	1.6320
Totals and averages,	663	608.69	623.66[2]	5.34	5.15[2]	$40 21	$39 44[2]	$1.7365	$1.7673[2]
Totals and averages, hospitals and miscellaneous,	3,765	3,569.99	3,207.25	4.28	4.43	$37 43	$36 70	$1.9856	$1.9127

[1] Excludes Foxborough Hospital.

[2] Includes Foxborough Hospital.

GENERAL STATISTICS.

TABLE 10. — *Statistical Form for State Institutions. — Prepared in Accordance with a Resolution of the National Conference of Charities and Corrections, adopted May 15, 1906.*

INSTITUTIONS.	SUPERINTENDENTS.	POPULATION.								
		NUMBER OF INMATES PRESENT AT BEGINNING OF FISCAL YEAR.			NUMBER RECEIVED DURING THE YEAR.			NUMBER DISCHARGED OR DIED DURING THE YEAR.		
		Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Worcester State Hospital,	Ernest V. Scribner, M.D.,	719	701	1,420	376	355	731	380	312	692
Taunton State Hospital,	Arthur V. Goss., M.D.,	686	597	1,283	348	300	648	342	253	595
Northampton State Hospital,	John A. Houston, M.D.,	469	473	942	263	232	495	251	231	482
Danvers State Hospital,	George M. Kline M.D.,	622	849	1,471	455	378	833	419	377	796
Westborough State Hospital,	Harry O. Spalding, M.D.,	514	699	1,213	279	562	841	267	484	751
Boston State Hospital,[1]	Henry P. Frost, M.D.,	617	803	1,420	1,589	1,534	3,123	1,497	1,459	2,956
Grafton State Hospital,	H. Louis Stick, M.D.,	648	737	1,385	122	233	355	51	75	126
Medfield State Hospital,	Edward French, M.D.,	665	977	1,642	60	153	213	74	104	178
Gardner State Hospital,	Charles E. Thompson, M.D.,	465	269	734	23	43	66	28	12	40
Monson State Hospital,	Everett Flood, M.D.,	485	478	963	173	151	324	133	139	272
Foxborough State Hospital,	Albert C. Thomas, M.D.,	203	-	203	108	107	215	64	25	89
Massachusetts School for the Feeble-minded at Waltham.	Walter E. Fernald, M.D.,	954	611	1,565	289	95	384	229	85	314
Wrentham State School,	George L. Wallace, M.D.,	273	356	629	60	68	128	55	28	83
Totals,		7,320	7,550	14,870	4,145	4,211	8,356	3,700	3,584	7,374

[1] Includes Psychopathic Department.

TABLE 10. — *Statistical Form for State Institutions, etc.* — Continued.

INSTITUTIONS.	POPULATION — Con.								
	NUMBER AT END OF THE FISCAL YEAR.			DAILY AVERAGE ATTENDANCE DURING YEAR.			AVERAGE NUMBER OF OFFICERS AND EMPLOYEES DURING THE YEAR.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Worcester State Hospital,	715	744	1,459	721.55	728.59	1,450.14	182	187	369
Taunton State Hospital,	692	644	1,336	681.90	611.99	1,293.89	152	152	304
Northampton State Hospital,	481	474	955	477.97	466.41	944.38	100	80	180
Danvers State Hospital,	658	850	1,508	648.58	848.10	1,496.68	167	150	317
Westborough State Hospital,	526	777	1,303	529.70	729.17	1,258.87	180	172	352
Boston State Hospital,[1]	709	878	1,587	678.15	857.12	1,535.27	196	266	462
Grafton State Hospital,	719	895	1,614	662.93	795.99	1,458.92	184	169	353
Medfield State Hospital,	651	1,026	1,677	649.12	998.88	1,648.00	179	207	386
Gardner State Hospital,	460	300	760	464.77	290.65	755.42	82	57	139
Monson State Hospital,	525	490	1,015	487.58	486.42	974.00	104	104	208
Foxborough State Hospital,	247	82	329	238.44	57.93	296.37	73	26	99
Massachusetts School for the Feeble-minded at Waltham,	1,014	621	1,635	995.00	610.00	1,605.00	85	205	290
Wrentham State School,	278	396	674	271.00	370.51	641.51	30	81	111
Totals,	7,675	8,177	15,852	7,506.69	7,851.76	15,358.45	1,714	1,856	3,570

[1] Includes Psychopathic Department.

TABLE 10. — *Statistical Form for State Institutions, etc.* — Concluded.

INSTITUTIONS.	EXPENDED.							
	CURRENT EXPENSES.						New Buildings, Permanent Improvements, Land, etc.	Grand Totals.
	Salaries and Wages.	Clothing.	Subsistence.	Ordinary Repairs.	Office, Domestic and Outdoor Expenses.	Totals.		
Worcester State Hospital,	$151,137 42	$7,208 33	$95,822 47	$20,184 91	$98,223 86	$372,576 99	$285 00	$372,861 99
Taunton State Hospital,	127,623 59	10,907 32	73,748 40	13,506 45	95,530 94	321,316 70	896 99	322,213 69
Northampton State Hospital,	83,763 78	4,988 81	57,412 91	10,027 68	51,467 10	207,660 28	12,631 00	220,291 28
Danvers State Hospital,	153,525 16	7,232 64	80,303 69	27,703 32	98,343 80	367,108 61	-	367,108 61
Westborough State Hospital,	152,575 21	7,867 79	73,849 98	13,203 08	93,759 77	341,255 83	12,853 39	354,109 22
Boston State Hospital,[1]	214,707 30	10,400 82	127,291 13	11,746 99	110,370 47	474,516 71	9,489 78	484,006 49
Grafton State Hospital,	143,700 88	15,713 72	84,726 11	18,575 36	96,762 76	359,478 83	67,335 43	426,814 26
Medfield State Hospital,	167,513 26	20,391 71	104,494 21	10,229 68	81,580 48	384,209 34	3,078 42	387,287 76
Gardner State Colony,	66,182 79	9,424 21	29,204 30	9,925 28	51,928 28	166,664 86	9,828 28	176,493 14
Monson State Hospital,	108,270 65	5,095 86	57,803 01	11,137 74	67,518 01	249,825 27	35,582 40	285,407 67
Foxborough State Hospital,	49,012 52	4,785 74	20,998 02	5,249 41	28,748 99	108,794 68	1,307 29	110,101 97
Massachusetts School for the Feeble-minded at Waltham.	130,012 43	16,010 36	65,124 52	12,215 28	86,470 55	309,833 14	3,413 79	313,246 93
Wrentham State School,	55,455 68	7,319 35	31,168 29	6,559 20	44,304 90	144,807 42	131,903 89	276,711 31
Totals,	$1,603,480 67	$127,346 66	$901,947 04	$170,264 38	$1,005,009 01	$3,808,048 66	$288,605 66	$4,096,654 32

[1] Includes Psychopathic Department.

TABLE 11. — *Classes of Persons under Supervision, their Number and Location, Oct. 1, 1915, and their Increase for the Year.*

	In Institutions.			Increase for the Year.			Total in Institutions and Family Care by Trustees.[1]			Increase for the Year.			Non-resident.			Epileptic.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
A. — Insane: —																		
Public institutions: —																		
Worcester Hospital,	708	698	1,406	9[2]	2	7[2]	710	743	1,453	7[2]	47	40	–	–	–	2	3	5
Taunton Hospital,	679	589	1,268	1	5	6	689	643	1,332	6	53	59	–	–	–	3	6	9
Northampton Hospital,	478	440	918	14	6[2]	8	481	472	953	14	5	19	–	–	–	2	3	5
Danvers Hospital,	656	836	1,492	34	7[2]	27	656	848	1,504	34	5	39	–	–	–	10	2	12
Westborough Hospital,	523	662	1,185	15	12[2]	3	525	722.	1,247	17	45	62	2	4	6	6	5	11
Boston Hospital,	692	842	1,534	94	60	154	693	851	1,544	94	69	163	–	–	–	16	4	20
Mental Wards, State Infirmary,	200	509	709	3[2]	29[2]	32[2]	200	509	709	3[2]	29[2]	32[2]	–	–	–	16	22	38
Grafton Hospital,	718	869	1,587	70	133	203	719	895	1,614	71	159	230	–	–	–	110	115	225
Medfield Hospital,	650	998	1,648	15[2]	21	6	651	1,026	1,677	14[2]	49	35	–	–	–	30	32	62
Gardner Colony,	453	277	730	12[2]	8	4[2]	460	300	760	5[2]	31	26	–	–	–	4	–	4
Monson Hospital,	208	158	366	39	12[2]	27	208	158	366	39	12[2]	27	–	–	–	208	158	366
Bridgewater Hospital,	822	–	822	37	–	37	822	–	822	37	–	37	–	–	–	22	–	22
Foxborough Hospital,	247	81	328	44	81	125	247	82	329	44	82	126	–	–	–	9	2	11
Totals,	7,034	6,959	13,993	309	244	553	7,061	7,249	14,310	327	504	831	2	4	6	438	352	790
Family care by State Board,	1	85	86[3]	11[2]	205[2]	216[2]	1	85	86	11[2]	205[2]	216[2]	–	–	–	–	–	–
Totals, public,	7,035	7,044	14,079	298	39	337	7,062	7,334	14,396	316	299	615	2	4	6	438	352	790
Private institutions: —																		
McLean Hospital,	80	130	210	5[2]	9	4	80	130	210	5[2]	9	4	17	26	43	1	2	3
Smaller institutions,	27	113	140	1[2]	6	5	27	113	140	1[2]	6	5	4	21	25	1	–	1
Totals, private,	107	243	350	6[2]	15	9	107	243	350	6[2]	15	9	21	47	68	2	2	4
Totals, public and private,	7,142	7,287	14,429	292	54	346	7,169	7,577	14,746	310	314	624	23	51	74	440	354	794

[1] Owing to stimulation of family care by trustees this figure shows increase for year of 278.

[2] Decrease.

[3] On Jan. 1, 1915, 178 patients were transferred from family care by State Board to family care by trustees of institutions.

TABLE 11. — *Classes of Persons under Supervision, etc.* — Continued.

	CRIMINAL.			OTHER CLASSES.												TOTAL UNDER CARE.		
				VOLUNTARY.						TEMPORARY CARE.			INEBRIATES.					
				MENTAL.			NON-MENTAL.											
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
A. — Insane: —																		
Public institutions: —																		
Worcester Hospital,	9	5	14	1	–	1	–	–	–	4	1	5	–	–	–	715	744	1,459
Taunton Hospital,	1	5	6	–	–	–	–	–	–	3	1	4	–	–	–	692	644	1,336
Northampton Hospital,	4	3	7	–	2	2	–	–	–	–	–	–	–	–	–	481	474	955
Danvers Hospital,	6	4	10	–	–	–	–	–	–	2	2	4	–	–	–	658	850	1,508
Westborough Hospital,	4	7	11	1	7	8	–	–	–	–	2	2	–	46	46	526	777	1,303
Boston Hospital,	8	–	8	–	–	–	–	–	–	16	27	43	–	–	–	709	878	1,587
Mental Wards, State Infirmary,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	200	509	709
Grafton Hospital,	44	32	76	–	–	–	–	–	–	–	–	–	–	–	–	719	895	1,614
Medfield Hospital,	4	8	12	–	–	–	–	–	–	–	–	–	–	–	–	651	1,026	1,677
Gardner Colony,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	460	300	760
Monson Hospital,	–	–	–	317	332	649	–	–	–	–	–	–	–	–	–	525	490	1,015
Bridgewater Hospital,	807	–	807	–	–	–	–	–	–	–	–	–	–	–	–	822	–	822
Foxborough Hospital,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	247	82	329
Totals,	887	64	951	319	341	660	–	–	–	25	33	58	–	46	46	7,405	7,669	15,074
Family care by State Board,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	85	86
Totals, public,	887	64	951	319	341	660	–	–	–	25	33	58	–	46	46	7,406	7,754	15,160
Private institutions: —																		
McLean Hospital,	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	80	131	211
Smaller institutions,	–	–	–	1	14	15	13	44	57	–	–	–	6	1	7	47	172	219
Totals, private,	–	–	–	1	15	16	13	44	57	–	–	–	6	1	7	127	303	430
Totals, public and private,	887	64	951	320	356	676	13	44	57	25	33	58	6	47	53	7,533	8,057	15,590

TABLE 11. — *Classes of Persons under Supervision, etc.* — Concluded.

	Number.			Increase for the Year.			Non-resident.			Epileptic.			School.			Custodial.			Total Inmates.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
B. — Feeble-minded: —																					
School for the Feeble-minded at Waltham,	1,014	620	1,634	60	9	69	14	3	17	8	5	13	456	215	671	558	405	963	1,014	620	1,634
Wrentham School,	278	396	674	5	40	45	–	–	–	–	–	–	132	94	226	147	301	448	278	396	674
Elm Hill Institution,	38	11	49	4[1]	1[1]	5[1]	28	9	37	4	–	4	15	6	21	23	5	28	38	11	49
Smaller private institutions,	5	8	13	–	–	–	–	–	–	–	–	–	3	5	8	2	3	5	5	8	13
Almshouses and private families,	112	122	234[2]	23	41	64	–	–	–	–	–	–	–	–	–	–	–	–	112	122	234
Totals, feeble-minded,	1,447	1,157	2,604	84	89	173	42	12	54	12	5	17	606	320	926	730	714	1,444	1,447	1,157	2,604
C. — Inebriates: —																					
Public institutions,	–	46	46	–	10	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Private institutions,	6	1	7	4	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Totals, inebriates,	6	47	53	4	10	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
D. — Epileptics: —																					
Monson Hospital,	525	490	1,015	40	12	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Public institutions for insane,	230	194	424	15[1]	37	22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
School for the Feeble-minded at Waltham,	8	5	13	9[1]	11[1]	20[1]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Family care by State Board,	–	–	–	–	1[1]	1[1]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Private institutions,	6	4	10	–	3[1]	3[1]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Totals, epileptics,	769	693	1,462	16	34	50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Whole number of persons under supervision,	8,980	9,214	18,194	387	455	842	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Viz.: insane, feeble-minded, epileptic and inebriate,	8,939	9,113	18,052	399	437	836	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Voluntary mental patients (sane),	3	24	27	10[1]	3[1]	13[1]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Temporary care,	25	33	58	3	7	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other classes,	13	44	57	5[1]	14	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

[1] Decrease.

[2] Figures taken from reports of overseers of poor, March 31, 1915.

TABLE 12. — *Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1915.*

	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	Mental Wards, State Infirmary.	Grafton Hospital.	Medfield Hospital.	Gardner Colony.
Remaining under care Sept. 30, 1914,	1,413	1,273	934	1,465	1,185	1,384	741	1,384	1,642	734
Men,	717	683	467	622	508	599	203	648	665	465
Women,	696	590	467	843	677	782	538	736	977	269
In institution,	1,413	1,262	910	1,465	1,182	1,380	741	1,384	1,642	734
Men,	717	678	464	622	508	598	203	648	665	465
Women,	696	584	446	843	674	782	538	736	977	269
In family care,[1]	–	11	24	–	3	1	–	–	–	–
Men,	–	5	3	–	–	1	–	–	–	–
Women,	–	6	21	–	3	–	–	–	–	–
Admitted during the year,	695	613	480	813	657	1,442	108	355	211	66
Men,	355	330	255	446	258	716	47	122	60	23
Women,	340	283	225	367	399	726	61	233	151	43
From the community,	466	471	354	607	428	1,237	42	–	110	–
Men,	236	264	196	336	178	620	28	–	50	–
Women,	230	207	158	271	250	617	14	–	60	–
By commitment,	455	467	360	574	378	806	42	–	109	–
Men,	230	261	181	317	161	403	28	–	49	–
Women,	235	206	179	257	217	403	14	–	60	–
Voluntary,	11	4	24	33	50[2]	431	–	–	1	–
Men,	6	3	15	19	17	217	–	–	1	–
Women,	5	1	9	14	33	214	–	–	–	–
By transfer,	49	37	13	38	64	23	48	345	93	58
From visit,	19	17	10	67	25	58	–	1	2	1
From escape,	4	2	5	1	5	2	4	2	–	2
Nominally for discharge,	156	86	68	100	135	122	14	7	6	5
Nominally for extension of visit,	–	–	–	–	–	–	–	–	–	–
Nominally from escape for discharge on visit,	1	–	–	–	–	–	–	–	–	–
Whole number of cases within the year,	2,108	1,886	1,414	2,278	1,842	2,823	849	1,739	1,853	800

[1] Patients boarded in families by institution.

[2] Includes 1 sane voluntary patient changed to insane classification.

TABLE 12. — *Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1915* — Continued.

	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	Mental State Wards, Infirmary.	Grafton Hospital.	Medfield Hospital.	Gardner Colony.
Dismissed within the year,	655	554	461	774	595	1,279	140	125	176	40
Men,	362	324	241	412	241	622	50	51	74	28
Women,	293	230	220	362	354	657	90	74	102	12
Viz.: Discharged,	296	224	169	300	265	689	25	11	27	13
Men,	172	129	103	171	102	342	13	6	14	9
Women,	124	95	66	129	163	347	12	5	13	4
Recovered,	46	52	37	37	68	117	1	-	4	-
Men,	25	41	24	32	23	51	1	-	3	-
Women,	21	11	13	5	45	66	-	-	1	-
Capable of self-support,	80	64	47	1	85	9	-	3	1	3
Improved,	78	77	62	217	83	202	14	3	1	9
Not improved,	91	31	15	42	27	214	10	5	21	1
Not insane,	1	-	3	3	2	147	-	-	-	-
Died,	132	166	104	183	113	203	63	90	98	7
Men,	76	82	50	92	62	113	18	35	38	7
Women,	56	84	54	91	51	90	45	55	60	-
Transferred,	85	70	79	111	81	216	36	5	42	3
On visit Sept. 30, 1915,	121	90	101	169	134	159	14	12	4	5
On escape Sept. 30, 1915,	21	4	8	11	2	12	2	7	5	7
Remaining under care Sept. 30, 1915,	1,453	1,332	953	1,504	1,247	1,544	709	1,614	1,677	760
Men,	710	689	481	656	525	693	200	719	651	460
Women,	743	643	472	848	722	851	509	895	1,026	300
In institutions,	1,406	1,268	918	1,492	1,185	1,534	709	1,587	1,648	730
Men,	708	679	478	656	523	692	200	718	650	453
Women,	698	589	440	836	662	842	509	869	998	277
In family care,	47	64	35	12	62	10	-	27	29	30
Men,	2	10	3	-	2	1	-	1	1	7
Women,	45	54	32	12	60	9	-	26	28	23

Supported by the State,	1,237	1,183	741	1,240	952	1,346	705	1,558	1,632	748
Reimbursing,	98	75	88	138	96	116	4	52	45	12
Private,	118	75	124	126	199	82	–	4	–	–
Daily average number under care,	1,445.16	1,291.95	941.54	1,496.18	1,205.48	1,498.15	714.98	1,458.40	1,647.89	755.42
In institution,	1,414.37	1,237.59	913.97	1,490.15	1,164.47	1,491.66	714.98	1,441.05	1,623.70	737.41
In family care,	30.79	54.36	27.57	6.03	41.01	6.49	–	17.35	24.19	18.01
State,	1,222.65	1,119.97	719.21	1,226.68	919.03	1,334.54	711.57	1,392.24	1,598.72	744.33
Reimbursing,	98.19	95.23	98.68	145.27	86.49	79.47	3.41	65.60	49.17	9.06
Private,[1]	124.32	76.75	123.65	124.23	199.96	84.14	–	0.56	–	2.03
Persons first admitted to any insane hospital,	368	378	303	477	294	1,008	31	–	80	–
Men,	194	218	152	273	129	503	19	–	38	–
Women,	174	160	151	204	165	505	12	–	42	–
Recent (insane less than one year),	176	189	147	297	128	446	14	–	34	–
Chronic (insane one year or more),	168	108	118	158	131	334	17	–	38	–
Unknown,	24	81	38	22	35	228	–	–	8	–
Persons admitted from the community,	464	470	379	601	427	1,199	42	–	110	–
Viz.: From cities and large towns,	360	300	279	519	285	1,129	39	–	106	–
From country districts,	104	170	100	82	142	70	3	–	4	–
Unknown,	–	–	–	–	–	–	–	–	–	–
Whole number of persons within the year,	1,940	1,793	1,339	2,161	1,698	2,657	835	1,732	1,847	795
Whole number of persons admitted within the year,	536	526	407	707	521	1,280	94	348	205	61
Whole number of persons dismissed within the year,	497	467	392	669	456	1,133	126	118	170	35

[1] Includes self-supporting.

TABLE 12. — *Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1915* — Continued.

	Monson Hospital.	Bridgewater Hospital.	Foxborough Hospital.	Total Public Institutions.	Family Care.[1]	Total Public.	McLean Hospital.	Smaller Institutions.	Total Private.	Total Public and Private.
Remaining under care Sept. 30, 1914,	339	785	203	13,479	302	13,781	206	135	341	14,122
Men,	169	785	203	6,734	12	6,746	85	28	113	6,859
Women,	170	-	-	6,745	290	7,035	121	107	228	7,263
In institution,	339	785	203	13,440	-	13,440	206	135	341	13,781
Men,	169	785	203	6,725	-	6,725	85	28	113	6,838
Women,	170	-	-	6,715	-	6,715	121	107	228	6,943
In family care,[2]	-	-	-	39	302	341	-	-	-	341
Men,	-	-	-	9	12	21	-	-	-	21
Women,	-	-	-	30	290	320	-	-	-	320
Admitted during the year,	120	105	213	5,878	8	5,886	124	187	311	6,197
Men,	66	105	106	2,889	1	2,890	56	45	101	2,991
Women,	54	-	107	2,989	7	2,996	68	142	210	3,206
From the community,	55	93	46	3,939	-	3,939	107	156	263	4,202
Men,	28	93	22	2,051	-	2,051	46	34	80	2,131
Women,	27	-	24	1,888	-	1,888	61	122	183	2,071
By commitment,	55	93	46	3,385	-	3,385	60	44	104	3,489
Men,	28	93	22	1,773	-	1,773	29	7	36	1,809
Women,	27	-	24	1,612	-	1,612	31	37	68	1,680
Voluntary,	-	-	-	554	-	554	47	112	159	713
Men,	-	-	-	278	-	278	17	27	44	322
Women,	-	-	-	276	-	276	30	85	115	391
By transfer,	58	4	165	995	5	1,000	11	20	31	1,031
From visit,	3	-	1	204	-	204	3	1	4	208
From escape,	-	-	-	27	-	27	-	-	-	27
Nominally for discharge,	4	7	1	711	3	714	3	10	13	727
Nominally for extension of visit,	-	1	-	1	-	1	-	-	-	1
Nominally from escape for discharge on visit,	-	-	-	1	-	1	-	-	-	1
Whole number of cases within the year,	459	890	416	19,357	310	19,667	330	322	652	20,319

Dismissed within the year,	93	68	87	5,047	224	5,271	120	182	302	5,573
Men,	27	68	62	2,562	12	2,574	61	46	107	2,681
Women,	66	–	25	2,485	212	2,697	59	136	195	2,892
Viz.: Discharged,	9	36	41	2,105	14	2,119	81	133	214	2,333
Men,	6	36	24	1,127	2	1,129	38	28	66	1,195
Women,	3	–	17	978	12	990	43	105	148	1,138
Recovered,	–	14	4	380	–	380	30	19	49	429
Men,	–	14	2	216	–	216	12	5	17	233
Women,	–	–	2	164	–	164	18	14	32	196
Capable of self-support,	–	4	–	297	10	307	8	5	13	320
Improved,	3	3	16	768	3	771	26	79	105	876
Not improved,	6	10	20	493	1	494	17	29	46	540
Not insane,	–	5	1	167	–	167	–	1	1	168
Died,	29	21	27	1,236	1	1,237	15	17	32	1,269
Men,	14	21	22	630	–	630	11	9	20	650
Women,	15	–	5	606	1	607	4	8	12	619
Transferred,	47	3	2	785	209	994	14	22	36	1,030
On visit Sept. 30, 1915,	8	8	11	836	–	836	10	9	19	855
On escape Sept. 30, 1915,	–	–	6	85	–	85	–	1	1	86
Remaining under care Sept. 30, 1915,	366	822	329	14,310	86	14,396	210	140	350	14,746
Men,	208	822	247	7,061	1	7,062	80	27	107	7,169
Women,	158	–	82	7,249	85	7,334	130	113	243	7,577
In institutions,	366	822	328	13,993	–	13,993	210	140	350	14,343
Men,	208	822	247	7,034	–	7,034	80	27	107	7,141
Women,	158	–	81	6,959	–	6,959	130	113	243	7,202
In family care,	–	–	1	317	86	403	–	–	–	403
Men,	–	–	–	27	1	28	–	–	–	28
Women,	–	–	1	290	85	375	–	–	–	375
Supported by the State,	342	816	315	12,814	76	12,890	–	–	–	12,890
Reimbursing,	16	6	14	760	5	765	–	–	–	765
Private,	8	–	–	736	5	741	210	140	350	1,091
Daily average number under care,	341.68	808.37	296.27	13,901.47	145.83	14,047.30	207.69	135.27	342.96	14,390.26
In institution,	341.68	808.37	295.65	13,675.05	–	13,675.05	207.69	135.27	342.96	14,018.01
In family care,	–	–	0.62	226.42	145.83	372.25	–	–	–	372.25
State,	323.00	804.80	285.69	12,402.43	123.37	12,525.80	–	–	–	12,525.80
Reimbursing,	12.37	3.57	10.58	757.09	8.11	765.20	–	–	–	765.20
Private,[3]	6.31	–	–	741.95	14.35	756.30	207.69	135.27	342.96	1,099.26

[1] Patients boarded in families by State Board.

[2] Patients boarded in families by institution.

[3] Includes self-supporting.

TABLE 12. — *Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1915* — Concluded.

	Monson Hospital.	Bridgewater Hospital.	Foxborough Hospital.	Total Public Institutions.	Family Care.[1]	Total Public.	McLean Hospital.	Smaller Institutions.	Total Private.	Total Public and Private.
Persons first admitted to any insane hospital,	42	74	32	3,087	-	3,087	60	117	177	3,264
Men,	23	74	14	1,637	-	1,637	30	27	57	1,694
Women,	19	-	18	1,450	-	1,450	30	90	120	1,570
Recent (insane less than one year),	42	13	11	1,497	-	1,497	44	90	134	1,631
Chronic (insane one year or more),	-	36	21	1,129	-	1,129	16	27	43	1,172
Unknown,	-	25	-	461	-	461	-	-	-	461
Persons admitted from the community,	55	91	46	3,811	-	3,811	104	151	249	4,035
Viz.: From cities and large towns,	48	74	45	3,117	-	3,117	82	119	195	3,288
From country districts,	7	17	1	694	-	694	22	32	54	747
Unknown,	-	-	-	-	-	-	-	-	-	-
Whole number of persons within the year,	453	878	414	17,803	306	17,897	322	298	608	18,430
Whole number of persons admitted within the year,	116	95	211	4,042	5	4,042	118	165	253	4,270
Whole number of persons dismissed within the year,	88	59	86	3,492	221	3,504	117	162	243	3,736

[1] Patients boarded in families by State Board.

TABLE 13. — *Forms of Mental Disease in Patients committed, discharged or who died, at Public Institutions for the Insane and McLean Hospital.*

	COMMITMENTS.									DISCHARGES, RECOVERIES AND CAPABLE OF SELF-SUPPORT.							
										WORCESTER HOSPITAL.		TAUNTON HOSPITAL.		NORTHAMPTON HOSPITAL.		DANVERS HOSPITAL.	
	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	McLean Hospital.	Other Institutions.	Total Commitments.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.
First admitted to any hospital: —																	
A. — Most curable: —																	
Manic-depressive insanity,	32	13	53	72	41	144	31	9	395	10	7	3	8	9	6	7	-
Allied to manic-depressive insanity,	1	-	-	-	-	1	-	2	2	2	-	-	-	-	-	-	-
Melancholia, acute,	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Confusional insanity, acute,	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-
Hysterical insanity,	2	2	-	-	1	6	-	-	11	1	-	-	-	-	-	-	-
Neurasthenia,	-	-	-	-	4	-	-	-	4	-	-	-	-	-	-	-	-
Psychoneurosis,	-	-	-	6	2	11	-	-	19	-	-	-	-	-	-	-	-
Symptomatic psychosis,	-	-	-	5	-	-	-	-	5	-	-	-	-	-	-	-	-
Exhaustion psychosis,	1	3	-	-	-	-	-	-	4	-	-	-	2	-	-	-	-
Infection exhaustion psychosis,	-	-	4	8	5	9	-	-	26	-	-	-	-	-	-	-	-
Alcoholic insanity, acute,	18	13	18	28	11	62	-	8	158	12	2	26	4	11	2	13	-
Toxic insanity, acute,	5	19	1	7	5	4	1	2	44	2	-	14	3	1	-	-	-
Delirium, acute,	-	1	4	-	-	-	-	-	5	-	-	1	-	2	-	-	-
Total A,	59	52	80	126	69	237	32	21	676	27	9	45	17	23	8	20	-

TABLE 13. — *Forms of Mental Disease in Patients committed, discharged or who died, at Public Institutions for the Insane and McLean Hospital* — Continued.

	COMMITMENTS.									DISCHARGES, RECOVERIES AND CAPABLE OF SELF-SUPPORT.							
										WORCESTER HOSPITAL.		TAUNTON HOSPITAL.		NORTHAMPTON HOSPITAL.		DANVERS HOSPITAL.	
	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	McLean Hospital.	Other Institutions.	Total Commitments.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.
B. — Less curable: —																	
Involution psychosis,	–	13	5	1	9	25	–	1	54	–	–	–	3	1	2	–	–
Choreic insanity,	1	1	1	1	–	3	–	–	7	–	–	–	–	–	–	–	–
Psychopathic inferiority,	11	1	7	7	–	11	1	2	40	–	7	–	1	–	–	–	–
Traumatic insanity,	2	1	–	–	–	4	–	–	7	–	–	–	–	–	–	1	–
Myxœdematous insanity,	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–
Alcoholic insanity, chronic,	8	12	27	26	1	43	–	24	141	1	7	1	5	–	4	–	–
Toxic insanity, chronic,	–	–	4	3	1	–	–	1	9	–	–	–	–	–	–	–	–
Korsakow's psychosis,	–	4	2	4	1	–	–	–	11	–	–	–	–	–	–	2	–
Dementia præcox,	140	133	66	97	79	199	5	85	804	1	27	1	16	3	13	–	–
Dementia secondary,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Paranoia,	1	1	1	–	–	–	–	3	6	–	–	–	1	–	–	–	–
Paranoid condition,	5	2	–	9	2	40	1	–	59	–	1	–	–	–	–	–	–
Delusional insanity, chronic,	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Total B,	168	168	114	148	94	325	7	116	1,140	2	42	2	26	4	19	3	–
Total A, B,	227	220	194	274	163	562	39	137	1,816	29	51	47	43	27	27	23	–

C. — Most incurable: —																		
Pellagrous insanity,	–	–	3	–	–	3	–	–	6	–	–	–	–	–	–	–	–	
General paralysis,	27	27	11	63	20	90	7	14	259	–	3	–	–	–	–	2	–	
Coarse brain lesions,	31	31	25	55	18	103	8	6	277	–	–	–	–	1	1	–	–	
Epileptic insanity,	5	9	5	9	6	16	–	44	94	–	–	–	1	–	–	–	–	
Imbecility,	21	16	25	31	18	42	–	22	175	–	2	–	5	–	4	–	–	
Senile insanity,	52	45	29	37	31	64	1	25	284	–	–	–	–	–	1	–	–	
Total C,	136	128	98	195	93	318	16	111	1,095	–	5	–	6	1	6	2	–	
Total A, B, C,	363	348	292	469	256	880	55	248	2,911	29	56	47	49	28	33	25	–	
D. — Undiagnosticated,	4	30	5	8	32	128	5	9	221	4	–	–	4	1	1	–	–	
Not insane,	1	–	6	–	6	–	–	2	15	–	–	–	–	–	–	–	–	
Total D,	5	30	11	8	38	128	5	11	236	4	–	–	4	1	1	–	–	
Total first admissions,	368	378	303	477	294	1,008	60	259	3,147	33	56	47	53	29	34	25	–	

TABLE 13. — *Forms of Mental Disease in Patients committed, discharged or who died, at Public Institutions for the Insane and McLean Hospital* — Continued.

	Discharges, Recoveries and Capable of Self-support — Concluded.								Total Discharges.					Died.	Aggregate Discharges and Deaths.
	Westborough Hospital.		Boston Hospital.		McLean Hospital.		Other Institutions.								
	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Improved.	Not Improved.	Total Discharges.		
First admitted to any hospital: —															
A. — Most curable: —															
Manic-depressive insanity,	24	14	42	2	9	3	1	–	105	40	112	40	297	38	335
Allied to manic-depressive insanity,	–	–	–	–	–	–	–	–	2	–	1	–	3	–	3
Melancholia, acute,	–	–	–	–	–	–	1	–	1	–	–	–	1	–	1
Confusional insanity, acute,	–	–	–	–	–	–	–	–	1	–	–	–	1	1	2
Hysterical insanity,	–	–	–	–	–	–	–	–	1	–	2	3	6	–	6
Neurasthenia,	1	–	–	–	–	–	–	–	1	–	2	–	3	–	3
Psychoneurosis,	1	–	–	–	–	–	–	–	1	–	4	1	6	–	6
Symptomatic psychosis,	–	–	–	–	–	–	–	–	–	–	1	1	2	3	5
Exhaustion psychosis,	–	–	–	–	–	–	–	–	–	2	–	–	2	1	3
Infection exhaustion psychosis,	1	–	1	–	–	–	–	–	2	–	3	1	6	12	18
Alcoholic insanity, acute,	6	5	22	–	–	–	5	2	95	15	33	6	149	5	154
Toxic insanity, acute,	2	–	3	–	1	–	–	–	23	3	6	–	32	5	37
Delirium, acute,	–	–	–	–	–	–	–	–	3	–	–	–	3	4	7
Total A,	35	19	68	2	10	3	7	2	235	60	164	52	511	69	580

B. — Less curable: —															
Involution psychosis,	2	–	7	–	–	–	–	–	10	5	11	9	35	20	55
Choreic insanity,	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Psychopathic inferiority,	–	–	–	–	–	–	–	–	–	8	18	6	32	3	35
Traumatic insanity,	–	–	1	–	–	–	–	–	2	–	3	2	7	–	7
Myxœdematous insanity,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic insanity, chronic,	–	5	2	4	–	–	–	–	4	25	43	14	86	22	108
Toxic insanity, chronic,	–	1	–	–	–	–	–	–	–	1	1	–	2	1	3
Korsakow's psychosis,	–	–	–	–	–	–	–	–	2	–	2	1	5	1	6
Dementia præcox,	12	19	1	1	–	–	1	5	19	81	156	154	410	109	519
Dementia secondary,	–	–	–	–	–	–	–	–	–	–	–	–	–	7	7
Paranoia,	–	–	–	–	–	–	–	–	–	1	–	3	4	2	6
Paranoid condition,	–	1	–	–	–	–	–	–	–	2	14	8	24	3	27
Delusional insanity, chronic,	–	–	–	–	–	–	–	–	–	–	–	1	1	8	9
Total B,	14	26	11	5	–	–	1	5	37	123	248	198	606	178	784
Total A, B,	49	45	79	7	10	3	8	7	272	183	412	250	1,117	247	1,364
C. — Most incurable: —															
Pellagrous insanity,	–	–	–	–	–	–	–	–	–	–	–	–	–	6	6
General paralysis,	–	1	–	–	–	2	–	–	2	6	33	28	69	165	234
Coarse brain lesions,	–	1	–	–	–	–	–	–	1	2	36	33	72	190	262
Epileptic insanity,	–	1	1	–	–	–	–	–	1	2	15	13	31	40	71
Imbecility,	–	3	–	–	–	–	–	2	–	16	26	25	67	25	92
Senile insanity,	–	2	–	–	–	–	–	–	–	3	26	24	53	216	269
Total C,	–	8	1	–	–	2	–	2	4	29	136	123	292	642	934
Total A, B, C,	49	53	80	7	10	5	8	9	276	212	548	373	1,409	889	2,298
D. — Undiagnosticated,	1	2	4	–	2	–	3	–	15	7	31	23	76	6	82
Not insane,	–	–	–	–	–	–	–	–	–	–	–	144	144	–	144
Total D,	1	2	4	–	2	–	3	–	15	7	31	167	220	6	226
Total first admissions,	50	55	84	7	12	5	11	9	291	219	579	540	1,629	895	2,524

TABLE 13.—*Forms of Mental Disease in Patients committed, discharged or who died, at Public Institutions for the Insane and McLean Hospital* — Continued.

	Commitments.									Discharges, Recoveries and Capable of Self-support.							
										Worcester Hospital.		Taunton Hospital.		Northampton Hospital.		Danvers Hospital.	
	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	McLean Hospital.	Other Institutions.	Total Commitments.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.
Other admissions: —																	
A. — Most curable: —																	
Manic-depressive insanity,	29	10	41	35	40	91	33	10	289	8	7	3	4	7	4	7	1
Allied to manic-depressive insanity,	1	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–
Hysterical insanity,	–	–	–	–	2	–	–	–	2	–	–	–	–	–	–	–	–
Neurasthenia,	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Psychoneurosis,	–	–	–	3	2	3	–	–	8	–	–	–	–	–	–	1	–
Exhaustion psychosis,	–	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Infection exhaustion psychosis,	–	–	–	1	–	–	–	–	1	–	–	–	–	–	–	–	–
Alcoholic insanity, acute,	2	–	6	4	2	12	–	5	31	3	3	1	–	–	2	4	–
Psychosis with somatic disease,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Toxic insanity, acute,	1	2	–	–	1	2	2	–	8	–	–	–	1	–	–	–	–
Delirium, acute,	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Total A,	33	13	48	43	47	108	35	15	342	12	10	4	6	7	6	12	1

B. — Less curable: —																	
Melancholia, chronic,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Involution psychosis,	–	4	–	1	3	2	–	3	13	–	–	–	–	–	–	–	–
Psychopathic inferiority,	4	–	1	1	1	4	1	–	12	–	1	–	–	–	–	–	–
Traumatic insanity,	–	–	–	–	1	3	–	–	4	–	–	–	–	–	–	–	–
Alcoholic insanity, chronic,	3	8	5	7	7	10	–	9	49	–	1	–	1	1	1	–	–
Toxic insanity, chronic,	–	–	1	–	1	–	–	–	2	–	–	–	–	–	–	–	–
Korsakow's psychosis,	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Dementia præcox,	41	43	16	41	42	41	1	32	257	–	9	1	3	–	5	–	–
Dementia secondary,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Paranoia,	–	1	2	–	–	–	–	1	4	–	–	–	–	–	–	–	–
Paranoid condition,	–	2	–	1	2	9	2	–	16	–	–	–	–	–	–	–	–
Delusional insanity, chronic,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total B,	48	58	26	51	57	69	4	45	358	–	11	1	4	1	6	–	–
Total A, B,	81	71	74	94	104	177	39	60	700	12	21	5	10	8	12	12	1
C. — Most incurable: —																	
Pellagrous insanity,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis,	5	8	–	7	7	14	2	2	45	–	–	–	1	–	–	–	–
Coarse brain lesions,	2	2	–	7	4	11	1	1	28	–	–	–	–	–	–	–	–
Epileptic insanity,	4	3	1	3	4	6	–	14	35	–	1	–	–	–	–	–	–
Imbecility,	3	5	3	16	3	3	–	3	36	–	2	–	–	–	1	–	–
Senile insanity,	2	3	1	2	3	3	–	4	18	–	–	–	–	–	–	–	–
Total C,	16	21	5	35	21	37	3	24	162	–	3	–	1	–	1	–	–
Total A, B, C,	97	92	79	129	125	214	42	84	862	12	24	5	11	8	13	12	1
D. — Undiagnosticated,	1	1	1	1	8	15	5	2	34	1	–	–	–	–	–	–	–
Not insane,	–	–	1	–	1	–	–	1	3	–	–	–	–	–	–	–	–
Total D,	1	1	2	1	9	15	5	3	37	1	–	–	–	–	–	–	–
Total other admissions,	98	93	81	130	134	229	47	87	899	13	24	5	11	8	13	12	1
Aggregates: —																	
Total A,	92	65	128	169	116	345	67	36	1,018	39	19	49	23	30	14	32	1
Total B,	216	226	140	199	151	394	11	161	1,498	2	53	3	30	5	25	3	–
Total C,	152	149	103	230	114	355	19	135	1,257	–	8	–	7	1	7	2	–
Total D,	6	31	13	9	47	143	10	14	273	5	–	–	4	1	1	–	–
Grand total,	466	471	384	607	428	1,237	107	346	4,046	46	80	52	64	37	47	37	1

TABLE 13. — *Forms of Mental Disease in Patients committed, discharged or who died, at Public Institutions for the Insane and McLean Hospital* — Concluded.

	Discharges, Recoveries and Capable of Self-support — Concluded.								Total Discharges.					Died.	Aggregate Discharges and Deaths.
	Westborough Hospital.		Boston Hospital.		McLean Hospital.		Other Institutions.								
	Recovered.	Capable of Self-Support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Recovered.	Capable of Self-support.	Improved.	Not improved.	Total Discharges.		
Other admissions: —															
A. — Most curable: —															
Manic-depressive insanity,	9	8	23	–	13	3	3	1	73	28	77	19	197	50	247
Allied to manic-depressive insanity,	–	–	–	–	–	–	–	–	1	–	–	–	1	–	1
Hysterical insanity,	–	2	–	–	–	–	–	–	–	2	–	–	2	–	2
Neurasthenia,	–	–	–	–	–	–	–	–	–	1	–	–	1	–	1
Psychoneurosis,	–	–	–	–	–	–	–	–	1	–	2	–	3	–	3
Exhaustion psychosis,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Infection exhaustion psychosis,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic insanity, acute,	1	–	6	–	–	–	2	–	17	5	7	–	29	1	30
Psychosis with somatic disease,	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Toxic insanity, acute,	–	–	–	–	2	–	–	–	2	1	–	1	4	–	4
Delirium, acute,	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Total A,	10	10	29	–	15	3	5	1	94	37	86	20	237	53	290

B. — Less curable: —															
Melancholia, chronic,	–	–	–	–	–	–	1	–	1	–	–	–	1	1	2
Involution psychosis,	–	1	2	–	–	–	1	–	3	1	3	3	10	9	19
Psychopathic inferiority,	–	–	–	–	–	–	–	–	–	1	3	1	5	2	7
Traumatic insanity,	–	–	–	–	–	–	–	–	–	–	1	2	3	–	3
Alcoholic insanity, chronic,	–	2	–	1	–	–	–	–	1	6	27	6	40	19	59
Toxic insanity, chronic,	–	–	–	–	–	–	–	–	–	–	1	–	1	2	3
Korsakow's psychosis,	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dementia præcox,	6	11	–	1	–	–	2	–	9	29	61	46	145	122	267
Dementia secondary,	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Paranoia,	–	–	–	–	–	–	–	1	–	1	1	1	3	12	15
Paranoid condition,	–	–	–	–	–	–	–	–	–	–	2	5	7	1	8
Delusional insanity, chronic,	–	–	–	–	–	–	–	–	–	–	–	–	–	4	4
Total B,	6	14	2	2	–	–	4	1	14	38	99	64	215	174	389
Total A, B,	16	24	31	2	15	3	9	2	108	75	185	84	452	227	679
C. — Most incurable: —															
Pellagrous insanity,	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
General paralysis,	–	–	–	–	–	–	–	–	–	1	3	6	10	28	38
Coarse brain lesions,	–	–	–	–	–	–	–	–	–	–	3	6	9	18	27
Epileptic insanity,	–	1	–	–	–	–	–	–	–	2	6	2	10	31	41
Imbecility,	–	2	–	–	–	–	–	–	–	5	10	10	25	16	41
Senile insanity,	1	–	–	–	–	–	–	–	1	–	2	–	3	34	37
Total C,	1	3	–	–	–	–	–	–	1	8	24	24	57	128	185
Total A, B, C,	17	27	31	2	15	3	9	2	109	83	209	108	509	355	864
D. — Undiagnosticated,	1	3	2	–	3	–	3	–	10	3	6	6	25	1	26
Not insane,	–	–	–	–	–	–	–	–	–	–	–	23	23	–	23
Total D,	1	3	2	–	3	–	3	–	10	3	6	29	48	1	49
Total other admissions,	18	30	33	2	18	3	12	2	119	86	215	137	557	356	913
Aggregates: —															
Total A,	45	29	97	2	25	6	12	3	329	97	250	72	748	122	870
Total B,	20	40	13	7	–	–	5	6	51	161	347	262	821	352	1,173
Total C,	1	11	1	–	–	2	–	2	5	37	160	147	349	770	1,119
Total D,	2	5	6	–	5	–	6	–	25	10	37	196	268	7	275
Grand total,	68	85	117	9	30	8	23	11	410	305	794	677[1]	2,186	1,251	3,437

[1] Includes 167 patients discharged as not insane.

TABLE 14. — *Probable Causes of Mental Disease in Persons admitted to Public Institutions for the Insane and McLean Hospital who were received for the First Time at Any Hospital.*

	First admitted.	Predisposing Causes.		
		Hereditary Tendency.	Neurotic Tendency.	Alcoholic Intemperance.
A. — Physical: —				
Acute infectious disease,	2	1	–	4
Adolescence,	20	9	9	1
Alcoholic intemperance,	397	34	10	258
Alcoholic intemperance and other causes,	5	–	1	6
Anæmia, pernicious,	2	–	–	–
Anterior poliomyelitis,	1	–	–	–
Apoplexy,	1	–	–	–
Appendicitis, purulent,	2	–	–	–
Arteriosclerosis,	113	3	6	14
Arteriosclerosis and other causes,	4	–	–	–
Birth injury,	1	1	–	–
Brain tumor,	6	–	–	–
Carcinoma,	3	–	–	–
Cardiac disease,	1	–	–	–
Cardio-renal disease,	4	–	–	–
Cerebral hemorrhage,	47	3	2	1
Cerebral hemorrhage and other causes,	6	–	1	–
Childbearing,	18	2	–	–
Chorea,	1	–	–	–
Coarse brain lesions,	3	–	1	1
Congenital,	234	57	44	17
Diabetes,	2	–	–	–
Drug habit,	14	1	1	–
Drug habit and alcohol,	2	–	–	2
Epilepsy,	39	4	3	3
Epilepsy and other causes,	2	1	–	–
Exposure,	1	–	–	–
Heat prostration,	1	–	–	1
Hemiplegia,	1	1	–	–
Heredity,	156	118	18	8
Heredity and other causes,	8	8	–	8
Hyperthyroidism with cardiac disease,	1	–	–	–
Insular sclerosis,	1	–	–	–
Idiopathic,	1	–	–	–
Indigestion,	2	2	–	–
Infectious disease,	9	–	–	–
Involution,	29	2	–	1
Involution and menopause,	25	7	11	1
Lead poisoning,	1	–	–	–
Leptomeningitis,	1	1	–	–
Meningitis, spinal,	1	1	1	–

TABLE 14. — *Probable Causes of Mental Disease in Persons admitted to Public Institutions for the Insane and McLean Hospital who were received for the First Time at Any Hospital* — Concluded.

	First admitted.	Predisposing Causes.		
		Hereditary Tendency.	Neurotic Tendency.	Alcoholic Intemperance.
A. — Physical — *Con.*				
Meningitis, tubercular,	1	–	–	–
Menopause,	15	1	–	–
Multiple sclerosis,	2	–	–	–
Myxœdema,	1	–	–	–
Nephritis,	7	–	–	–
Nephritis and arteriosclerosis,	3	–	–	–
Neuropathic,	6	–	–	–
Pellagra,	6	1	–	–
Pituitary disease,	1	–	–	–
Pneumonia,	2	1	–	–
Post operative,	1	2	1	–
Rickets,	9	5	–	–
Senility,	161	9	16	8
Senility and arteriosclerosis,	159	4	5	20
Sexual shock,	4	3	–	–
Somatic disease,	16	2	1	–
Surgical shock,	1	1	1	–
Syphilis,	303	11	17	22
Syphilis and other causes,	1	–	–	–
Tabes dorsalis, alcohol and bromide,	1	–	–	–
Thyrogenic,	1	–	–	–
Thyroid disease,	2	–	–	–
Trauma,	15	2	1	3
Tuberculosis,	3	–	–	–
Tuberculosis and intemperance,	2	–	–	2
Typhoid fever,	2	–	–	–
Total physical,	1,893	298	150	381
B. — Mental: —				
Change in environment,	2	–	–	–
Domestic and financial trouble,	2	–	–	–
Fright,	2	1	–	–
Grief,	6	–	1	–
Overwork,	17	3	1	–
Religious excitement,	1	–	–	–
Shock, mental,	1	–	–	–
Worry and other causes,	53	4	14	2
Total mental,	84	8	16	2
Totals,	1,977	306	166	383
Unknown,	1,119	184	30	6
Not insane,	51	–	–	–
Totals,	3,147	490	196	389

TABLE 15. — *Duration of Mental Disease and its Treatment in Persons who recovered or died at Public Institutions for the Insane and McLean Hospital.*

PERIOD.	FIRST ADMITTED TO ANY HOSPITAL.									ALL OTHER ADMISSIONS.					
	DURATION BEFORE ADMISSION.			HOSPITAL RESIDENCE.			WHOLE DURATION.			WHOLE KNOWN PERIOD OF MENTAL DISEASE.			WHOLE KNOWN PERIOD OF HOSPITAL RESIDENCE.		
	Men.	Women.	Totals.	Men.	Women.	Totals.	Men.	Women.	Totals.	Men.	Women.	Totals.	Men.	Women.	Totals.
A. — Recovered: —															
Under 1 month,	87	43	130	31	17	48	11	4	15	2	–	2	4	–	4
From 1 to 3 months,	29	33	62	64	37	101	43	24	67	4	3	7	7	10	17
3 to 6 months,	18	18	36	30	33	63	41	26	67	6	5	11	12	8	20
6 to 12 months,	5	14	19	25	23	48	29	31	60	13	15	28	19	14	33
1 to 2 years,	8	3	11	8	10	18	16	19	35	14	14	28	10	14	24
2 to 5 years,	3	2	5	5	4	9	7	9	16	9	12	21	5	8	13
5 to 10 years,	1	3	4	2	1	3	2	3	5	4	2	6	1	2	3
10 to 20 years,	1	–	1	1	–	1	2	–	2	3	2	5	1	–	1
Over 20 years,	–	–	–	–	–	–	1	–	1	1	–	1	–	–	–
Totals,	152	116	268	166	125	291	152	116	268	56	53	109	59	56	115
Unknown,	14	9	23	–	–	–	14	9	23	4	4	8	1	1	2
Totals,	166	125	291	166	125	291	166	125	291	60	57	117	60	57	117
Average of known cases (in months),	4.90	4.93	4.91	6.47	6.30	6.40	10.57	9.74	10.21	41.55	27.17	34.55	16.56	14.16	15.39

B. — Died: —															
Congenital,	5	3	8	–	–	–	3	1	4	3	1	4	–	–	–
Under 1 month,	51	40	91	93	59	152	13	9	22	1	–	1	2	4	6
From 1 to 3 months,	54	45	99	64	54	118	29	22	51	2	2	4	4	5	9
3 to 6 months,	55	48	103	63	52	115	29	16	45	4	2	6	9	5	14
6 to 12 months,	51	34	85	63	43	106	38	38	76	4	3	7	5	6	11
1 to 2 years,	76	48	124	67	48	115	86	41	127	5	5	10	17	12	29
2 to 5 years,	98	87	185	57	65	122	122	99	221	25	15	40	25	22	47
5 to 10 years,	27	30	57	32	51	83	49	69	118	19	29	48	30	39	69
10 to 20 years,	9	21	30	27	29	56	39	46	85	21	55	76	33	68	101
Over 20 years,	10	17	27	17	11	28	28	32	60	55	57	112	33	35	68
Totals,	436	373	809	483	412	895	436	373	809	139	169	308	158	196	354
Unknown,	47	39	86	–	–	–	47	39	86	19	29	48	–	2	2
Totals,	483	412	895	483	412	895	483	412	895	158	198	356	158	198	356
Average of known cases (in months),	31.08	41.58	35.92	35.58	47.13	40.90	60.25	75.92	67.48	162.17	199.03	182.40	130.81	147.48	140.04

TABLE 16. — *Nativity and Parentage of Insane Persons admitted to Public Institutions for the Insane and McLean Hospital, who were received for the First Time at Any Hospital.*

PLACES OF NATIVITY.	1915.									TWELVE YEARS, 1904-15.		
	MEN.			WOMEN.			TOTALS.					
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
Massachusetts,	666	258	266	575	218	218	1,241	476	484	11,987	4,977	5,086
Other New England States,	155	155	135	126	127	133	281	282	268	3,108	3,053	3,041
Other States,	91	59	70	79	50	56	170	109	126	1,882	1,319	1,391
Total native,	912	472	471	780	395	407	1,692	867	878	16,977	9,349	9,518
Other countries: —												
Africa,	–	–	–	–	–	–	–	–	–	7	8	6
Albania,	3	2	2	–	–	–	3	2	2	5	3	3
Argentine Republic,	–	–	–	–	–	–	–	–	–	1	–	–
Armenia,	5	5	5	1	1	1	6	6	6	55	52	51
Asia,	–	–	–	–	–	–	–	–	–	2	2	2
At sea,	–	–	–	–	–	–	–	–	–	5	1	–
Australia,	–	–	–	–	–	2	–	–	2	1	2	4
Austria,	22	25	22	18	21	21	40	46	43	279	293	289
Azores,	11	12	11	9	11	10	20	23	21	169	180	174
Bahama Islands,	–	–	–	–	–	–	–	–	–	1	1	1
Barbadoes Islands,	–	–	–	1	1	–	1	1	–	6	7	7
Belgium,	3	3	3	–	–	–	3	3	3	19	18	18
Bermuda,	–	–	–	1	–	2	1	–	2	1	–	3
Bohemia,	1	1	1	–	–	–	1	1	1	8	7	7
Brasil,	–	–	1	–	–	–	–	–	1	–	–	1
Bulgaria,	–	–	–	–	–	–	–	–	–	1	2	2
Canada,	157	186	201	147	164	163	304	350	364	3,040	3,392	3,532
Cape Verde Islands,	3	5	5	–	–	–	3	5	5	41	42	39
China,	2	3	4	1	–	–	3	3	4	38	38	39
Denmark,	1	1	1	4	4	4	5	5	5	36	44	41
East Indies,	–	–	–	–	–	–	–	–	–	2	1	–
Egypt,	–	–	–	–	–	–	–	–	–	2	–	–
England,	59	68	71	56	89	88	115	157	159	1,245	1,711	1,573
Finland,	15	16	16	12	12	12	27	28	28	227	221	218

France,	6	10	8	5	9	5	11	19	13	70	122	97
Germany,	28	49	43	16	33	32	44	82	75	447	754	705
Greece,	20	19	20	3	4	3	23	23	23	110	115	111
Iceland,	–	–	–	–	–	–	–	–	–	1	1	1
India,	–	–	–	–	–	–	–	–	–	7	1	4
Ireland,	148	380	383	243	443	450	391	823	833	4,651	8,727	8,713
Italy,	74	84	84	33	41	42	107	125	126	632	702	690
Japan,	–	–	–	–	–	–	–	–	–	1	1	1
Lithuania,	1	1	1	–	–	–	1	1	1	9	8	8
Macedonia,	–	–	–	–	–	–	–	–	–	2	2	2
Madeira Islands,	–	–	–	1	1	1	1	1	1	4	3	3
Malta, Isle of,	–	–	–	–	–	–	–	–	–	2	1	1
Mexico,	1	1	1	–	–	–	1	1	1	1	2	2
Netherlands,	–	–	–	–	1	1	–	1	1	16	28	27
New Brunswick,	1	2	1	–	–	–	1	2	1	63	51	52
New Zealand,	–	–	–	–	–	–	–	–	–	–	–	1
Newfoundland,	2	3	6	7	6	8	9	9	14	80	74	85
Norway,	7	7	7	4	4	3	11	11	10	76	87	80
Nova Scotia,	3	4	5	8	7	7	11	11	12	116	99	108
Poland,	11	13	13	6	5	4	17	18	17	178	176	170
Portugal,	5	7	7	4	4	3	9	11	10	65	73	66
Prince Edward Island,	1	2	1	2	1	2	3	3	3	21	21	23
Prussia,	–	–	–	–	–	–	–	–	–	–	2	–
Roumania,	1	1	1	–	–	–	1	1	1	6	6	5
Russia,	86	95	94	54	61	62	140	156	156	989	1,050	1,045
Sandwich Islands,	–	–	–	–	–	–	–	–	–	1	–	1
Scotland,	13	37	27	14	32	29	27	69	56	351	658	568
Sicily,	2	1	1	–	2	1	2	3	2	5	6	5
Society Islands,	–	–	–	–	–	–	–	–	–	–	1	1
South America,	–	–	–	1	–	–	1	–	–	7	4	2
Spain,	2	2	2	1	2	1	3	4	3	16	23	19
St. Helena,	–	–	–	1	1	1	1	1	1	2	1	1
Sweden,	18	24	24	22	25	24	40	49	48	487	557	548
Switzerland,	2	3	2	–	1	1	2	4	3	22	31	30
Syria,	3	3	3	2	2	2	5	5	5	43	39	38
Turkey,	12	13	13	–	–	–	12	13	13	87	84	86
Wales,	2	2	3	1	2	1	3	4	4	21	26	29
West Indies,	7	6	7	2	4	2	9	10	9	66	66	62
Total foreign,	738	1,096	1,100	680	994	988	1,418	2,090	2,088	13,846	19,627	19,400
Unknown,	17	99	96	20	91	85	37	190	181	292	2,139	2,197
Totals,	1,667	1,667	1,667	1,480	1,480	1,480	3,147	3,147	3,147	31,115	31,115	31,115

TABLE 17. — *Civil Condition of Insane Persons admitted to Public Institutions for the Insane and McLean Hospital who were received for the First Time at Any Hospital.*

CIVIL CONDITION.	1915.			TWELVE YEARS, 1904-15.		
	Men.	Women.	Totals.	Men.	Women.	Totals.
Unmarried,	785	605	1,390	7,752	5,624	13,376
Married,	709	595	1,304	6,821	5,791	12,612
Widowed,	134	249	383	1,728	2,727	4,455
Divorced,	20	27	47	195	224	419
Unknown,	19	4	23	186	67	253
Totals,	1,667	1,480	3,147	16,682	14,433	31,115

TABLE 18. — *Occupations of Insane Persons admitted to Public Institutions for the Insane and McLean Hospital who were received for the First Time at Any Hospital.*

OCCUPATIONS.	1915.			TWELVE YEARS, 1904-15.		
	Men.	Women.	Totals.	Men.	Women.	Totals.
Educated or professional,	67	73	140	618	528	1,146
Domestic,	47	283	330	267	2,457	2,724
Farmers,	53	–	53	683	–	683
Housekeepers,	–	610	610	–	6,012	6,012
Laborers,	367	–	367	3,630	–	3,630
Mechanical,	394	21	415	3,551	61	3,612
Operatives,	122	79	201	1,490	985	2,475
Traders,	158	46	204	1,630	309	1,939
Miscellaneous,	290	95	385	2,698	825	3,523
Totals,	1,498	1,207	2,705	14,567	11,177	25,744
No occupation,	156	267	423	1,898	3,048	4,946
Unknown,	13	6	19	217	208	425
Totals,	1,667	1,480	3,147	16,682	14,433	31,115

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital.*

INSTITUTIONS.	INSANE COMMITMENTS.				FIRST CASES OF INSANITY — PERCENTAGES.							
					NATIVITY.							
					PATIENTS.				MOTHERS, NATIVE.		FATHERS, NATIVE.	
					MASSACHUSETTS.		NATIVE.					
	All.	First to Any Hospital.	PERCENTAGE OF FIRST CASES OF INSANITY.									
			1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	466	368	78.97	80.58	34.89	31.82	49.18	47.67	27.46	26.83	28.03	25.35
Taunton Hospital,	471	378	80.25	81.11	41.67	39.44	51.61	52.17	29.97	33.68	30.81	32.49
Northampton Hospital,	384	303	78.91	80.76	42.19	37.97	59.14	57.69	34.25	35.67	33.22	34.07
Danvers Hospital,	607	477	78.58	79.32	40.46	40.20	58.28	56.16	34.14	34.36	33.77	34.21
Westborough Hospital,	428	294	68.69	74.53	52.41	44.06	63.79	61.92	34.47	40.91	34.98	40.59
Boston Hospital,	1,237	1,008	81.49	82.17	38.08	39.62	52.63	52.95	26.48	24.30	25.19	23.22
Medfield Hospital,[1]	110	80	72.73	–	11.54	–	32.05	–	14.47	–	16.88	–
Monson Hospital,	55	42	76.36	90.56	78.05	73.42	82.93	83.02	23.68	38.16	35.90	39.26
Foxborough Hospital,[1]	46	32	69.57	–	37.50	–	40.63	–	14.29	–	14.29	–
Mental Wards, State Infirmary,	42	31	73.80	86.99	19.35	16.04	32.26	32.50	16.13	17.82	10.00	18.54
Bridgewater Hospital,	93	74	79.57	82.47	22.97	29.04	35.14	45.35	12.16	22.02	13.51	23.39
Totals and averages, public,	3,939	3,087	78.37	80.31	39.57	38.63	53.80	54.08	28.79	31.42	28.62	30.62
McLean Hospital,	107	60	56.07	65.16	56.67	50.21	85.00	80.86	69.49	68.71	63.33	65.59
Totals and averages, public and McLean,	4,046	3,147	77.78	79.74	39.90	39.05	54.41	55.00	29.60	32.72	29.32	31.85

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.											
	COMMITTED FROM —				AGE.				DURATION PRIOR TO COMMITMENT.			
	CITIES AND TOWNS OVER 10,000, 79.53 PER CENT. OF STATE POPULATION.		COUNTRY DISTRICTS, 20.47 PER CENT. OF STATE POPULATION.		60 YEARS OR OVER.		AVERAGE AGE.		1 YEAR OR MORE.		UNDER 1 YEAR.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	76.63	83.29	23.37	16.71	23.22	20.00	44.34	43.26	48.84	42.72	51.16	57.28
Taunton Hospital,	63.76	68.45	36.24	31.55	20.86	24.14	51.30	43.74	36.36	36.72	63.64	63.28
Northampton Hospital,	74.26	75.41	25.74	24.59	16.50	22.66	42.80	43.62	44.53	40.06	55.47	59.94
Danvers Hospital,	85.32	85.30	14.68	14.70	19.50	19.24	42.86	42.93	34.73	38.60	65.27	61.40
Westborough Hospital,	64.29	71.06	35.71	28.94	21.03	19.04	44.13	43.23	50.58	42.19	49.42	57.81
Boston Hospital,	94.35	98.27	5.65	1.73	17.06	20.55	43.20	44.34	42.82	38.83	57.18	61.17
Medfield Hospital,[1]	95.00	–	5.00	–	11.25	–	39.67	–	52.78	–	47.22	–
Monson Hospital,	85.71	70.51	14.29	29.49	–	4.59	22.00	23.57	–	40.00	–	60.00
Foxborough Hospital,[1]	96.88	–	3.12	–	6.25	–	37.61	–	65.63	–	34.37	–
Mental Wards, State Infirmary,	93.55	88.99	6.45	11.01	32.26	21.64	47.34	41.64	54.84	51.14	45.16	48.86
Bridgewater Hospital,	83.78	80.40	16.22	19.60	5.56	5.92	34.02	36.28	73.47	65.95	26.53	34.05
Totals and averages, public,	81.92	81.66	18.08	18.34	18.34	19.92	43.70	42.86	42.99	40.43	57.01	59.57
McLean Hospital,	88.33	76.49	11.67	23.51	20.00	15.09	46.08	42.70	26.67	30.20	73.33	69.80
Totals and averages, public and McLean,	82.05	81.47	17.95	18.53	18.37	19.76	43.75	42.87	42.63	40.05	57.37	59.95

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.											
	DURATION PRIOR TO COMMITMENT — Con.				CAUSES ASSIGNED BY HOSPITAL PHYSICIANS.							
	UNDER 6 MONTHS.		UNDER 3 MONTHS.		CONGENITAL.		HEREDITY.		HEREDITY AND OTHER CAUSES.		TOTAL HEREDITY.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	40.70	47.47	29.36	36.84	19.57	13.28	8.15	10.50	9.51	11.39	17.66	21.89
Taunton Hospital,	56.90	55.66	47.47	46.46	4.23	12.15	11.38	9.24	7.94	7.70	19.32	16.94
Northampton Hospital,	45.66	47.79	33.21	39.55	16.50	27.74	15.51	10.70	0.99	12.81	16.50	23.51
Danvers Hospital,	58.46	46.57	37.80	35.07	7.76	5.78	7.34	10.98	1.68	6.35	9.02	17.33
Westborough Hospital,	39.00	48.31	30.12	34.91	4.08	5.92	–	1.83	12.24	16.07	12.24	17.90
Boston Hospital,	45.26	50.17	33.59	38.39	2.48	1.54	–	–	16.57	10.69	16.57	10.69
Medfield Hospital,[1]	41.67	–	30.56	–	11.25	–	–	–	18.75	–	18.75	–
Monson Hospital,	100.00	20.00	100.00	20.00	–	–	–	–	45.24	18.07	45.24	18.07
Foxborough Hospital,[1]	31.25	–	25.00	–	–	–	25.00	–	31.25	–	56.25	–
Mental Wards, State Infirmary,	9.68	35.86	9.68	15.39	–	11.26	–	–	12.90	17.57	12.90	17.57
Bridgewater Hospital,	16.33	25.23	4.08	17.48	13.51	8.78	–	–	21.62	10.65	21.62	10.65
Totals and averages, public,	45.81	49.07	35.00	37.88	7.48	8.61	5.28	6.40	11.11	10.95	16.39	17.35
McLean Hospital,	61.67	53.88	46.67	37.03	–	–	–	–	30.00	43.06	30.00	43.06
Totals and averages, public and McLean,	46.17	49.25	35.26	37.85	7.34	8.32	5.18	6.17	11.47	12.07	16.65	18.24

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.											
	CAUSES ASSIGNED BY HOSPITAL PHYSICIANS.											
	SENILITY.		COARSE BRAIN LESIONS.		ALCOHOLIC INTEMPERANCE.		ALCOHOLIC INTEMPERANCE AND OTHER CAUSES.		TOTAL ALCOHOLIC INTEMPERANCE.		SYPHILIS.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	12.77	10.12	7.34	8.95	7.61	12.84	9.78	9.29	17.39	22.13	6.79	8.45
Taunton Hospital,	10.58	12.50	4.76	4.07	12.43	16.15	4.77	6.02	17.20	22.17	7.14	2.29
Northampton Hospital,	9.90	13.34	7.92	7.99	21.78	17.09	3.96	6.03	25.74	23.12	3.96	2.16
Danvers Hospital,	3.77	5.45	15.09	10.01	13.84	14.35	3.77	2.46	17.61	16.81	14.26	9.78
Westborough Hospital,	9.86	8.53	4.76	7.13	4.76	9.96	0.34	0.66	5.10	10.62	6.46	5.23
Boston Hospital,	13.79	14.75	0.79	10.86	12.30	14.07	3.47	4.14	15.77	18.21	13.00	9.76
Medfield Hospital,[1]	3.75	–	8.75	–	26.25	–	13.75	–	40.00	–	8.75	–
Monson Hospital,	–	–	–	1.07	7.14	2.87	–	3.31	7.14	6.18	2.38	0.87
Foxborough Hospital,[1]	6.25	–	–	–	31.25	–	–	–	31.25	–	–	–
Mental Wards, State Infirmary,	32.26	4.44	3.23	16.85	12.90	19.31	3.23	1.48	16.13	20.79	22.58	12.96
Bridgewater Hospital,	2.70	3.40	2.70	2.11	22.97	35.77	5.41	7.36	28.38	43.13	–	–
Totals and averages, public,	10.37	10.31	5.60	8.55	12.96	14.75	4.40	4.90	17.36	19.65	9.62	6.71
McLean Hospital,	–	0.42	16.67	6.62	–	2.49	1.67	4.66	1.67	7.15	11.67	6.15
Totals and averages, public and McLean,	10.17	10.05	5.82	8.51	12.71	14.34	4.35	4.83	17.06	19.22	9.66	6.71

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.											
	FORMS OF MENTAL DISEASE.											
	PERSONS TO FIRST CASES.								RECOVERIES TO FIRST RECOVERIES.			
	CURABLE.		GENERALLY INCURABLE.						CURABLE.		GENERALLY INCURABLE.	
	A.		B.		C.		B and C.		A.		B and C.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	16.03	19.47	45.65	46.10	36.96	32.84	82.61	78.94	81.82	94.59	6.06	2.68
Taunton Hospital,	13.76	15.18	44.44	44.20	33.86	34.03	78.30	78.23	95.74	73.91	4.26	25.40
Northampton Hospital,	26.40	24.31	37.62	33.18	32.34	41.30	69.96	74.48	79.31	88.54	17.24	11.46
Danvers Hospital,	26.42	25.14	31.03	28.22	40.88	38.53	71.91	66.75	80.00	83.47	20.00	5.88
Westborough Hospital,	23.47	26.46	31.97	35.52	31.63	31.53	63.60	67.05	70.00	73.16	28.00	25.40
Boston Hospital,	23.51	25.86	32.24	31.27	31.55	33.55	63.79	64.82	80.95	88.55	14.29	6.48
Medfield Hospital,[1]	11.25	–	55.00	–	32.50	–	87.50	–	100.00	–	–	–
Monson Hospital,	–	–	–	–	100.00	100.00	100.00	100.00	–	26.66	–	53.34
Foxborough Hospital,[1]	12.50	–	68.75	–	18.75	–	87.50	–	–	–	–	–
Mental Wards, State Infirmary,	–	10.99	29.03	37.74	70.97	50.94	100.00	88.68	100.00	40.00	–	–
Bridgewater Hospital,	10.81	13.13	55.41	59.59	20.27	20.39	75.68	79.98	42.86	90.81	14.29	1.43
Totals and averages, public,	20.86	21.59	36.70	36.81	34.95	35.61	71.65	72.42	80.65	83.21	14.69	13.10
McLean Hospital,	53.33	54.23	11.67	17.31	26.67	16.37	38.34	33.68	83.33	88.40	–	1.53
Totals and averages, public and McLean,	21.48	22.69	36.22	36.15	34.80	34.97	71.02	71.12	80.76	83.60	14.09	12.19

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.									
	FORMS OF MENTAL DISEASE — CON.									
	MANIC-DEPRESSIVE INSANITY.		ACUTE ALCOHOLIC INSANITY.		CHRONIC ALCOHOLIC INSANITY.		DEMENTIA PRÆCOX.		GENERAL PARALYSIS.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	8.70	9.30	4.89	6.28	2.17	5.51	38.04	31.71	7.34	10.10
Taunton Hospital,	3.44	4.66	3.44	7.11	3.17	6.14	35.19	30.60	7.14	6.60
Northampton Hospital,	17.49	14.71	5.94	8.20	8.91	4.00	21.78	20.98	3.63	3.71
Danvers Hospital,	15.09	13.72	5.87	8.69	5.45	3.29	20.34	19.26	13.21	11.43
Westborough Hospital,	13.95	17.44	3.74	5.26	0.34	4.19	26.87	25.39	6.80	6.30
Boston Hospital,	14.29	13.15	6.15	7.29	4.27	4.31	19.74	12.46	8.93	10.79
Medfield Hospital,[1]	5.00	–	–	–	11.25	–	41.25	–	6.25	–
Monson Hospital,	–	–	–	–	–	–	–	–	–	–
Foxborough Hospital,[1]	9.38	–	9.38	–	12.50	–	50.00	–	3.13	–
Mental Wards, State Infirmary,	–	2.86	–	5.13	12.90	12.73	12.90	19.30	91.35	10.80
Bridgewater Hospital,	2.70	4.22	6.76	3.38	9.46	12.47	43.24	32.68	2.70	6.19
Totals and averages, public,	11.79	11.23	5.12	6.81	4.57	5.00	25.88	23.04	8.16	8.40
McLean Hospital,	51.67	48.13	–	1.68	–	0.18	8.33	6.71	11.67	7.75
Totals and averages, public and McLean,	12.23	12.45	5.02	6.64	4.43	4.84	25.55	22.49	8.23	8.38

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 19. — *Relative to First Cases of Insanity in Public Institutions and McLean Hospital* — Concluded.

INSTITUTIONS.	FIRST CASES OF INSANITY — PERCENTAGES — CON.							
	FORMS OF MENTAL DISEASE — CON.							
	COARSE BRAIN LESIONS.		EPILEPTIC INSANITY.		IMBECILITY.		SENILE INSANITY.	
	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.	1915.	Average Five Years, 1910-14.
Worcester Hospital,	8.42	5.24	1.36	1.51	5.71	3.14	14.13	12.85
Taunton Hospital,	8.20	5.85	2.38	2.70	4.23	4.59	11.90	14.30
Northampton Hospital,	8.25	9.04	1.65	2.03	8.25	10.60	9.57	15.65
Danvers Hospital,	11.53	10.74	1.89	2.14	6.50	6.86	7.76	7.36
Westborough Hospital,	6.12	7.39	2.04	1.65	6.12	6.23	10.54	9.97
Boston Hospital,	10.22	6.11	1.59	1.17	4.17	2.21	6.35	13.20
Medfield Hospital,[1]	–	–	–	–	11.25	–	15.00	–
Monson Hospital,	–	–	100.00	100.00	–	–	–	–
Foxborough Hospital,[1]	–	–	3.13	–	6.25	–	6.25	–
Mental Wards, State Infirmary,	6.45	6.32	3.23	0.68	9.68	15.78	32.26	18.08
Bridgewater Hospital,	5.41	1.88	–	3.42	10.81	5.17	1.35	3.98
Totals and averages, public,	8.71	7.20	3.05	3.23	5.67	5.35	9.17	11.41
McLean Hospital,	13.33	7.45	–	0.57	–	–	1.67	0.61
Totals and averages, public and McLean,	8.80	7.23	2.99	3.10	5.56	5.17	9.02	11.05

[1] Patients admitted by commitment to Medfield and Foxborough hospitals this year for the first time.

TABLE 20. — *Relative to Recoveries of the Insane in Public Institutions and McLean Hospital.*

INSTITUTIONS.	Number.	PERCENTAGE OF ALL RECOVERIES OF INSANE ON —						FIRST CASES OF INSANITY.		
		COMMITMENTS.		WHOLE NUMBER OF PERSONS.		DAILY AVERAGE NUMBER.		RECOVERIES.		
									PERCENTAGE OF FIRST CASES.	
		1915.	Average Four Years, 1912-15.	1915.	Average Four Years, 1912-15.	1915.	Average Four Years, 1912-15.	Number.	1915.	Average Four Years, 1912-15.
Worcester Hospital,	46	9.87	13.45	2.37	3.73	3.18	5.12	33	8.97	12.40
Taunton Hospital,	52	11.04	8.53	2.90	2.69	4.02	3.95	47	12.43	8.88
Northampton Hospital,	37	9.64	12.00	2.76	3.41	3.92	4.78	29	9.57	11.45
Danvers Hospital,	37	6.10	9.94	1.71	2.75	2.47	3.87	25	5.24	9.53
Westborough Hospital,	68	15.89	16.87	4.00	4.68	5.64	6.71	50	17.01	16.46
Boston Hospital,	117	9.46	13.44	4.40	5.78	7.81	9.88	84	8.33	11.68
Grafton Hospital,[1]	–	–	–	–	0.06	–	0.07	–	–	–
Medfield Hospital,[1]	4	3.64	0.91	0.22	0.09	0.24	0.11	3	3.75	0.94
Gardner Colony,[1]	–	–	–	–	0.03	–	0.04	–	–	–
Monson Hospital,[1]	–	–	–	–	–	–	–	–	–	–
Foxborough Hospital,[1]	4	8.70	2.18	0.97	0.35	1.35	0.46	–	–	–
Mental Wards, State Infirmary,	1	2.38	0.60	0.12	0.03	0.14	0.04	1	3.23	0.81
Bridgewater Hospital,	14	15.05	20.38	1.59	2.18	1.73	2.42	7	9.46	18.48
Totals and averages, public,	380	9.65	12.28	2.13	2.67	2.73	3.39	279	9.04	11.37
McLean Hospital,	30	28.04	32.26	9.32	11.51	14.44	18.46	12	20.00	25.59
Totals and averages, public and McLean,	410	10.13	12.91	2.27	2.86	2.91	3.64	291	9.25	11.75

[1] Previous to this year, Grafton, Medfield, Gardner, Monson and Foxborough were grouped under the heading "Other public institutions."

TABLE 20. — *Relative to Recoveries of the Insane in Public Institutions and McLean Hospital* — Concluded.

INSTITUTIONS.	Number.	FIRST CASES OF INSANITY — CON.									
		CURABLE CASES — GROUP A.					MANIC-DEPRESSIVE INSANITY.			ACUTE ALCOHOLIC INSANITY.		
		PERCENTAGE OF FIRST CASES.		RECOVERIES.			Number.	PERCENTAGE OF FIRST CASES.		Number.	PERCENTAGE OF FIRST CASES.	
				Number.	PERCENTAGE OF SUCH FIRST CASES.							
		1915.	Average Five Years, 1910-14.		1915.	Average Five Years, 1910-14.		1915.	Average Five Years, 1910-14.		1915.	Average Five Years, 1910-14.
Worcester Hospital,	59	16.03	19.47	27	45.76	59.68	32	8.70	9.30	18	4.89	6.28
Taunton Hospital,	52	13.76	15.18	45	86.54	44.24	13	3.44	4.66	13	3.44	7.11
Northampton Hospital,	80	26.40	24.31	23	28.75	42.77	53	17.49	14.71	18	5.94	8.20
Danvers Hospital,	126	26.42	25.14	20	15.87	32.17	72	15.09	13.72	28	5.87	8.69
Westborough Hospital,	69	23.47	26.46	35	50.72	49.97	41	13.95	17.44	11	3.74	5.26
Boston Hospital,	237	23.51	25.85	68	28.69	42.22	144	14.29	13.15	62	6.15	7.29
Grafton Hospital,[1]	–	–	–	–	–	–	–	–	–	–	–	–
Medfield Hospital,[1]	9	11.25	–	3	33.33	–	4	5.00	–	–	–	–
Gardner Colony,[1]	–	–	–	–	–	–	–	–	–	–	–	–
Monson Hospital,[1]	–	–	–	–	–	–	–	–	–	–	–	–
Foxborough Hospital,[1]	4	12.50	–	–	–	–	3	9.38	–	3	9.38	–
Mental Wards, State Infirmary,	–	–	10.99	1	–	9.45	–	–	2.86	–	–	5.13
Bridgewater Hospital,	8	10.81	13.13	3	37.50	–	2	2.70	4.22	5	6.76	3.38
Totals and averages, public,	644	20.86	21.59	225	34.94	45.34	364	11.79	11.23	158	5.12	6.81
McLean Hospital,	32	53.33	54.23	10	31.25	45.41	31	51.67	48.13	–	–	1.68
Totals and averages, public and McLean,	676	21.48	22.69	235	34.76	45.30	395	12.23	12.45	158	5.02	6.64

[1] Previous to this year, Grafton, Medfield, Gardner, Monson and Foxborough were grouped under the heading "Other public institutions."

TABLE 21. — *Relative to Deaths of the Insane in Public Institutions and McLean Hospital.*

INSTITUTIONS.	Number of Deaths.	PERCENTAGE OF DEATHS ON —					
		WHOLE NUMBER OF PERSONS.		DAILY AVERAGE NUMBER.		DISCHARGES AND DEATHS.	
		1915.	Average Two Years, 1914-15.	1915.	Average Two Years, 1914-15.	1915.	Average Two Years, 1914-15.
Worcester Hospital,	132	6.80	7.19	9.13	9.79	30.84	31.14
Taunton Hospital,	166	9.26	10.68	12.85	15.54	42.56	45.34
Northampton Hospital,	104	7.77	7.62	11.03	10.74	38.09	38.32
Danvers Hospital,	183	8.47	8.63	12.23	12.32	37.89	39.35
Westborough Hospital,	113	6.65	7.02	9.37	10.05	29.89	31.70
Boston Hospital,	203	7.64	8.32	13.55	14.55	22.76	23.90
Grafton Hospital,	90	5.20	5.10	6.17	5.84	89.11	84.03
Medfield Hospital,	98	5.31	5.80	5.95	6.32	78.40	85.10
Gardner Colony,	7	0.88	1.21	0.93	1.32	35.00	46.07
Monson Hospital,	29	6.40	7.76	8.49	9.42	76.32	80.85
Foxborough Hospital,	27	6.52	6.44	9.11	7.96	39.71	66.52
Mental Wards, State Infirmary,	63	7.54	7.14	8.81	8.28	71.59	69.53
Bridgewater Hospital,	21	2.39	2.89	2.60	3.19	36.84	33.73
Totals and averages, public,	1,236	6.94	7.35	8.89	9.37	36.99	38.42
McLean Hospital,	15	4.66	4.77	7.22	7.34	15.62	14.96
Totals and averages, public and McLean,	1,251	6.91	7.32	8.87	9.34	36.40	37.70

TABLE 21. — *Relative to Deaths of the Insane in Public Institutions and McLean Hospital* — Continued.

INSTITUTIONS.	PERCENTAGE OF PERSONS WHO DIED AFFECTED WITH CERTAIN MENTAL DISEASES.							
	Curable Forms (Group A).	Average Five Years, 1910-14.	Senile Insanity.	Average Five Years, 1910-14.	General Paralysis.	Average Five Years, 1910-14.	Coarse Brain Lesions.	Average Five Years, 1910-14.
Worcester Hospital,	3.79	9.19	28.78	26.78	18.94	24.04	23.48	15.42
Taunton Hospital,	3.01	7.75	27.71	28.69	16.27	17.22	19.28	12.87
Northampton Hospital,	15.38	8.08	27.88	40.95	13.46	10.22	23.08	17.75
Danvers Hospital,	23.50	13.00	17.49	14.41	21.86	22.39	14.75	20.41
Westborough Hospital,	9.73	10.30	24.77	25.54	17.70	18.17	15.93	18.32
Boston Hospital,	6.40	14.30	18.23	29.97	22.66	22.11	32.02	16.28
Grafton Hospital,	3.33	4.43	5.56	9.50	5.56	4.39	–	4.15
Medfield Hospital,	10.20	4.88	10.20	–	2.04	2.21	–	1.91
Gardner Colony,	14.29	3.25	–	–	–	2.68	–	1.82
Monson Hospital,	–	–	–	–	–	–	–	–
Foxborough Hospital,	18.52	4.98	22.22	26.71	7.41	6.72	11.11	8.93
Mental Wards, State Infirmary,	7.94	9.85	26.98	20.58	4.76	7.50	3.17	10.03
Bridgewater Hospital,	–	5.54	9.52	9.45	14.29	17.81	23.81	13.18
Totals and averages, public,	9.47	9.26	20.23	21.65	15.13	16.05	16.75	13.97
McLean Hospital,	33.33	25.28	–	8.23	40.00	18.65	6.67	25.29
Totals and averages, public and McLean,	9.75	9.48	19.98	21.47	15.43	16.09	16.63	14.12

TABLE 21. — *Relative to Deaths of the Insane in Public Institutions and McLean Hospital* — Concluded.

INSTITUTIONS.	PERCENTAGE OF PERSONS WHO DIED AFFECTED WITH CERTAIN PHYSICAL DISEASES.									
	Tuberculosis.	Average Five Years, 1910-14.	Pneumonia.	Average Five Years, 1910-14.	Organic Cardiac Disease.	Average Five Years, 1910-14.	Organic Renal Disease.	Average Five Years, 1910-14.	Malignant Tumors.	Average Five Years, 1910-14.
Worcester Hospital,	9.09	4.74	19.70	16.88	12.12	9.37	2.27	4.45	2.27	1.93
Taunton Hospital,	12.65	9.08	31.93	25.68	19.88	15.00	3.01	3.69	-	1.36
Northampton Hospital,	4.81	7.67	5.77	4.47	2.88	9.87	1.92	0.63	3.85	4.66
Danvers Hospital,	8.20	7.28	21.31	21.02	19.13	15.27	7.65	5.08	1.09	1.37
Westborough Hospital,	6.19	8.92	26.55	20.31	13.27	8.98	3.54	4.96	2.65	3.61
Boston Hospital,	5.91	7.00	14.78	25.13	10.84	11.60	4.93	4.44	3.94	2.08
Grafton Hospital,	28.89	20.10	10.00	15.38	15.56	20.94	3.33	6.35	6.67	4.91
Medfield Hospital,	16.33	18.07	19.39	4.49	21.43	22.78	1.02	0.71	2.04	3.80
Gardner Colony,	-	28.95	-	7.68	85.71	19.92	-	7.80	-	3.25
Monson Hospital,	20.69	13.94	10.34	16.76	3.45	5.54	6.90	1.90	-	-
Foxborough Hospital,	7.41	12.05	8.52	13.15	11.11	32.77	7.41	18.38	3.70	5.26
Mental Wards, State Infirmary,	12.70	20.28	12.70	7.21	14.29	10.51	9.52	9.79	1.59	1.22
Bridgewater Hospital,	19.05	19.02	23.81	4.21	4.76	17.74	4.76	-	-	0.62
Totals and averages, public,	10.84	10.41	18.85	17.01	14.48	13.77	4.29	4.34	2.43	2.43
McLean Hospital,	-	-	-	9.91	13.33	13.27	-	6.51	-	0.87
Totals and averages, public and McLean,	10.71	10.27	18.63	16.92	14.47	13.77	4.24	4.38	2.40	2.41

Members of the State Board of Insanity.

Date of Original Appointment.	Name.	Residence.	Term expires.	Retired.	
				Date.	Reason.
September, 1898,	*George F. Jelly, M.D.,*	Boston,	–	December, 1910	Resigned.
September, 1898,	*Herbert B. Howard, M.D.,*[1]	Boston,	–	January, 1902	Resigned.
September, 1898,	*Charles R. Codman,*	Barnstable,	–	September, 1906	Term expired.
September, 1898,	*Edward S. Bradford,*	Springfield,	–	February, 1900	Resigned.
September, 1898,	*Francis B. Gardner,*	Brockton,	–	February, 1902	Resigned.
February, 1900,	*Albert L. Harwood,*	Newton Center,	–	September, 1905	Term expired.
January, 1902,	*James B. Ayer, M.D.,*	Boston,	–	September, 1907	Term expired.
December, 1902,	*Seward W. Jones,*	Newton Highlands,	–	December, 1906	Resigned.
September, 1905,	*Michael J. O'Meara, M.D.,*[2]	Worcester,	–	July, 1914	Term expired.
October, 1906,	*Henry P. Field,*	Northampton,	–	December, 1912	Term expired.
January, 1907,	*William F. Whittemore,*	Boston,	–	December, 1913	Resigned.
September, 1907,	*Herbert B. Howard, M.D.,*	Boston,	–	March, 1913	Term expired.
December, 1910,	*Edward W. Taylor, M.D.,*	Boston,	–	November, 1913	Term expired.
December, 1912,	*John Whiting Mason,*	Northampton,	–	July, 1914	Term expired.
March, 1913,	*L. Vernon Briggs, M.D.,*[3]	Boston,	–	July, 1914	Term expired.
November, 1913,	*James M. W. Hall,*	Newton,	–	July, 1914	Term expired.
January, 1914,	*Roger Wolcott,*	Milton,	–	July, 1914	Term expired.
August, 1914,	Michael J. O'Meara, M.D.,	Worcester,	August, 1917	–	–
August, 1914,	L. Vernon Briggs, M.D.,	Boston,	August, 1916	–	–
August, 1914,	Chas. E. Ward,[4]	Buckland,	August, 1918	–	–

[1] Reappointed September, 1907. [2] Reappointed August, 1914. [3] Reappointed August, 1914. [4] Reappointed Nov. 3, 1915.

DIRECTORY OF INSTITUTIONS.

PUBLIC.

WORCESTER STATE HOSPITAL (opened 1833): —

Trustees: Miss Georgie A. Bacon, Worcester, chairman; Donald Gordon, Boston, clerk; Mrs. Ellen A. Sheehan, Worcester; Amos Chase, Lynn; William J. Delehanty, M.D., Worcester; Timothy J. Foley, M.D., Worcester.

Regular meeting, first Tuesday of each month.

Superintendent and treasurer, Ernest V. Scribner, M.D.

Senior assistant physician, B. Henry Mason, M.D.

Assistant physicians, George A. MacIver, M.D., Harold C. Arey, M.D., Roy C. Jackson, M.D., Sidney M. Bunker, M.D., George E. Mott, M.D., R. Grant Barry, M.D., Jennie G. McIntosh, M.D.

Pathologist, Harold I. Gosline, M.D.

Steward, Arthur E. Gilman.

Visiting days, daily, 10 A.M. to 12 M., and 1 to 4 P.M.

Staff meetings, daily, 8.30 A.M.

Location, Belmont Street, Worcester, one and one-half miles from Union Station (Boston & Albany, New York, New Haven & Hartford and Boston & Maine).

TAUNTON STATE HOSPITAL (opened 1854): —

Trustees: Charles C. Cain, Jr., Taunton, chairman; Mrs. Elizabeth C. M. Gifford, East Boston, secretary; Simeon Borden, Fall River; Arthur B. Reed, North Abington; Joseph C. Desmond, New Bedford; Mrs. Margaret C. Smith, Taunton; Philip E. Brady, Attleboro.

Regular meeting, second Thursday of each month.

Superintendent, Arthur V. Goss, M.D.

Assistant superintendent, Horace G. Ripley, M.D.

Clinical director and pathologist, A. Myerson, M.D.

Senior assistant physicians, Raoul G. Provost, M.D., John F. O'Brien, M.D., John J. Thompson, M.D.

Junior assistant physicians, Fannie C. Haines, M.D., Francis S. Caldicott, M.D.

TAUNTON STATE HOSPITAL (opened 1854) — *Concluded.*

Treasurer, Frank W. Boynton.
Steward, Stephen F. Tracy.
Visiting days, every day.
Staff meetings, Monday, Tuesday, Thursday, Friday and Saturday, at 8.15 A.M.
Location, Hodges Avenue, Taunton, one mile from railroad station (New York, New Haven & Hartford).

NORTHAMPTON STATE HOSPITAL (opened 1858): —

Trustees: Henry L. Williams, Northampton, chairman; Joseph W. Stevens, Greenfield, secretary; Miss Caroline A. Yale, Northampton; Luke Corcoran, M.D., Springfield; John McQuaid, Pittsfield; Charles S. Shattuck, Hatfield; Mrs. Emily N. Newton, Holyoke.
Regular meeting, first Thursday of each month.
Superintendent, John A. Houston, M.D.
Assistant physicians, Edward C. Greene, M.D., B. Angela Bober, M.D., Arthur Nelson Ball, M.D., Beatrice A. Reed, M.D., Harriet M. Whitney, M.D.
Treasurer and steward, Lewis F. Babbitt.
Visiting days, for relatives or friends, every day; for the general public, every day except Sunday.
Staff meetings, daily, except Sundays, at 8.15 A.M.
Location, Prince Street ("Hospital Hill"), Northampton, one and one-half miles from the railroad station, reached by carriage (Massachusetts Central and Connecticut River branches of Boston & Maine).

DANVERS STATE HOSPITAL (opened 1878): —

Post office and railroad station, Hathorne (Boston & Maine).
Trustees: S. Herbert Wilkins, Salem, chairman; Samuel Cole, Beverly, secretary; Miss Mary W. Nichols, Danvers; Seward W. Jones, Newton Highlands; Ernest B. Dane, Boston; Miss Annie M. Kilham, Beverly; Dan A. Donahue, Salem.
Regular meeting, second Friday of each month.
Superintendent, George M. Kline, M.D.
Assistant superintendent, John B. Macdonald, M.D.
Assistant physicians, Nelson G. Trueman, M.D., Alice M. Patterson, M.D., David T. Brewster, M.D., Alfred P. Chronquest, M.D., William J. Thompson, M.D.

DANVERS STATE HOSPITAL (opened 1878) — *Concluded.*

Pathologist, Lawson G. Lowrey, M.D.
Treasurer, Horace M. Brown.
Steward, Scott Whitcher.
Visiting days, every day.
Staff meetings, daily, at 8 A.M.
Location, Maple and Newbury streets, Danvers, one-quarter mile from railroad station.

WESTBOROUGH STATE HOSPITAL (opened 1886): —

Trustees: N. Emmons Paine, M.D., West Newton, chairman; Walter F. Mahoney, M.D., Westborough, secretary; Miss Sarah B. Williams, Taunton; John J. Shaughnessey, Marlborough; Thomas F. Dolan, Boston; Sewell C. Brackett, Boston; Mrs. Emily Young O'Brien, Brookline.
Regular meeting, first Thursday of each month.
Superintendent, Harry O. Spalding, M.D.
Assistant superintendent, M. M. Jordan, M.D.
First assistant physician, H. B. Ballou, M.D.
Senior assistant physician, W. A. Jillson, M.D.
Assistant physicians, Alice S. Cutler, M.D., Emma H. Fay, M.D., M. J. Shealey, M.D.
Pathologist and Director of Clinical Psychiatry, Solomon C. Fuller, M.D.
Steward, Melville L. Stacy.
Treasurer, Mabel J. Goddard.
Visiting days, every week day; Sundays, by obtaining written permission.
Staff meetings, daily, at 11.30 A.M.
Location, two and one-quarter miles from Westborough station (Boston & Albany); one mile from Talbot station (New York, New Haven & Hartford).

BOSTON STATE HOSPITAL (opened 1839): —

Post office, Dorchester Center; railroad station, Forest Hills (New York, New Haven & Hartford).
Trustees: Henry Lefavour, Boston, chairman; Hon. Melvin S. Nash, Hanover, secretary; Mrs. Katherine G. Devine, South Boston; Lehman Pickert, Brookline; Mrs. Helen B. Hopkins, Boston; John A. Kiggen, Hyde Park; John F. Fennessey, M.D., Dorchester.

BOSTON STATE HOSPITAL (opened 1839) — *Concluded.*

Regular meeting, on the second Tuesday of each month.
Superintendent, Henry P. Frost, M.D.
Assistant superintendent, Samuel W. Crittenden, M.D.
Senior assistant physician, Ermy C. Noble, M.D.
Assistant physicians, Mary E. Gill-Noble, M.D., John I. Wiseman, M.D., William M. Dobson, M.D., Edmund M. Pease, M.D., Geneva Tryon, M.D.
Pathologist, Mary E. Morse, M.D.
Steward, William E. Elton.
Treasurer, Fred L. Brown.
Location, East Group, Harvard Street, Dorchester, near Blue Hill Avenue; West Group, Walk Hill Street, about one-half mile from Blue Hill Avenue, one and one-half miles from railroad station; Psychopathic Department, 74 Fenwood Road, corner of Brookline Avenue.
Visiting days, 2 to 4 P.M., daily.

Psychopathic Department (opened 1912): —

Post office, 74 Fenwood Road, Boston.
Director, Elmer E. Southard, M.D.
Administrator, Elisha H. Cohoon, M.D.
Chief of staff, Herman M. Adler, M.D.
Assistant physicians, Anna C. Wellington, M.D., Harriet M. Gervais, M.D., Edward T. Gibson, M.D.
Junior assistant physicians, Cornelia B. J. Schorer, M.D., George E. McPherson, M.D.
Assistant physicians, out-patient service, A. Warren Stearns, M.D., Donald Gregg, M.D.
Psychologist, Robert M. Yerkes, Ph.D.
Assistant psychologist, Marjorie Sawyer, B.A.
Internes in psychology, Cecelio S. Rossy, John H. Bazeley.
Internes, Diego A. Biascoechea, Dennis W. Crile, Mervin Freeman, Ross Golden, Adrian G. Gould, Wilbert E. Hardy, Hilmar Koefod, C. W. McClure, Ben D. Paul, David L. Rapport, John B. Rieger, Anna E. Steffen, Edward S. Welles, Gertrude G. Fisher, M.D.
Chief of social service, out-patient department, Mary C. Jarrett, A.B.
Dietitian, Gertrude P. Innes.
Clinical historian, Elizabeth Chapman.

GRAFTON STATE HOSPITAL, FORMERLY WORCESTER STATE ASYLUM (opened 1877): —

Trustees: Leander F. Herrick, Worcester, chairman; Mrs. Margaret A. Cashman, Newburyport, secretary; Henry J. Perreault, Worcester; Miss Mary C. Henry, Worcester; Dr. Peter O. Shea, Worcester; Roger W. Cutler, Boston; John P. Bowditch, Framingham.

Superintendent and treasurer, H. Louis Stick, M.D.

Assistant physicians, Arthur E. Pattrell, M.D., Hiram L. Horsman, M.D., Donald R. Gilfillan, M.D., William A. MacIntyre, M.D., Mary Johnson, M.D., Ada F. Harris, M.D.

Pathologist, Frederick H. Baker, M.D.

Visiting surgeon, Lemuel Woodward, M.D.

Visiting days, for relatives or friends, every day; for the general public, every day except Sunday.

Location, Summer Street, Worcester, five minutes' walk from Union Station (Boston & Albany, Boston & Maine and New York, New Haven & Hartford).

Grafton Colony: —

The Grafton Colony of this institution is situated on the main line of the Boston & Albany Railroad, between Worcester and Westborough, about eight miles from Worcester. This colony is a branch of the main institution, and in no way a separate hospital. Patients are transferred from the hospital to the colony and from the colony to the hospital in the same way as from one ward to another in the main institution. The transfer of a patient does not necessarily mean any change for either better or worse in the mental condition of the individual. Transfers are made either to relieve overcrowding or because it is believed that the one place or the other will be better for the patient. The colony is administered from the main institution in Worcester, and equal medical care and attendance is given in either place. Notice of transfer between the hospital and the colony is sent to relatives and friends of patients for their convenience in visiting. The visiting days are every day in the week, and by special request Sunday, from 9.30 A.M. to 4 P.M. The colony can be reached by trolley either from the Westborough or North Grafton stations of the Boston & Albany Railroad, or from the Lyman Street crossing of the Boston & Worcester electrics. All correspondence should continue to be addressed, as usual, to the Grafton State Hospital, Box 1178, Worcester.

MEDFIELD STATE HOSPITAL (opened 1896): —

Post office, Harding; railroad station, Medfield Junction (New York, New Haven & Hartford).

Trustees: Walter Rapp, Brockton, chairman; Albert Evans, M.D., Boston, secretary; Mrs. Sarah J. Rand, Cambridge; Mrs. Nellie Barker Palmer, Framingham; George O. Clark, M.D., Boston; David M. Kasanof, Roxbury; Hon. J. C. Joseph Flamand, Cambridge.

Regular meeting, first Thursday following the first Tuesday of each month.

Superintendent and treasurer, Edward French, M.D.

Assistant physicians, Lewis M. Walker, M.D., George A. Troxell, M.D., Walter Burrier, M.D., Christina Leonard, M.D., Anna Waite, M.D., Walter E. Wade, D.D.S.

Steward, Louis A. Hall.

Visiting days, every day.

Location, Asylum Road, one mile from Medfield Junction railroad station.

GARDNER STATE COLONY (opened 1902): —

Post office, Gardner; railroad station, East Gardner.

Trustees: Edmund A. Whitman, Cambridge, chairman; Mrs. Amie H. Coes, Worcester, secretary; William H. Baker, M.D., Lynn; Owen A. Hoban, Gardner; George N. Harwood, Barre; Mrs. Alice Miller Spring, Fitchburg; Thomas H. Shea, Fitchburg.

Regular meeting, first Friday occurring on or after the fourth day of each month.

Superintendent and treasurer, Charles E. Thompson, M.D.

Assistant superintendent, Harlan L. Paine, M.D.

Assistant physicians, James L. MacAuslan, M.D., Marion E. Kenworthy, M.D.

Visiting days, every day at any hour, including Sundays and holidays.

Location, East Gardner, two minutes' walk from East Gardner railroad station.

MONSON STATE HOSPITAL (opened 1898): —

Post office and railroad station, Palmer (Boston & Albany).

Trustees: Michael I. Shea, M.D., Chicopee Falls, chairman; William Jameson, Chicopee Falls, secretary; Mrs. Mary B. Townsley, Springfield; George A. Moore, M.D., Palmer; George D. Storrs, Ware; Mrs. Mary E. Donahue, Melrose Highlands; J. Ubalde Paquin, M.D., New Bedford.

MONSON STATE HOSPITAL (opened 1898) — *Concluded.*

Regular meeting, first Thursday of each month.
Superintendent, Everett Flood, M.D.
Assistant superintendent, Morgan B. Hodskins, M.D.
Senior assistant physician, Ransom A. Greene, M.D.
Assistant physicians, Helen Taft Cleaves, M.D., Donald J. MacLean, M.D., Erwin S. Bundy, M.D.
Pathologist, Douglas A. Thom, M.D.
Treasurer, Sarah E. Spalding.
Steward, Charles F. Simonds.
Visiting days, every day.
Staff meetings, every day except Sundays and holidays at 11.15 A.M.
Location, one mile from railroad station.

FOXBOROUGH STATE HOSPITAL (opened 1893. Devoted exclusively to the care of the insane since June 1, 1914): —

Trustees: Henry T. Schaefer, Boston, chairman; Sarah E. Coppinger, M.D., Boston, secretary; Thomas J. Scanlan, M.D., Boston; Edward C. Donnelly, Dedham; Mrs. Mary Agnes Mahan, Boston; Joseph H. Guillet, Lowell; Isaac Heller, Boston.
Regular meeting, second Thursday of each month.
Superintendent and treasurer, Albert C. Thomas, M.D.
Assistant physicians, James F. McFadden, M.D.; Eudora W. Faxon, M.D.
Steward, William A. Carpenter.
Visiting days, every day from 9 to 11 A.M. and 2 to 5 P.M.
Staff meetings, daily, at 8.30 A.M.
Location, one mile north of Foxborough Center. Can be reached by trolley from Norwood or Mansfield (New York, New Haven & Hartford).

MASSACHUSETTS SCHOOL FOR THE FEEBLE-MINDED AT WALTHAM (opened 1848): —

Post office and railroad station, Waverley (Boston & Maine).
Trustees appointed by the Governor: Francis J. Barnes, M.D., Cambridge; Edward W. Emerson, M.D., Concord; Prof. Thomas N. Carver, Cambridge; Frederick H. Nash, Weston; Frank H. Stewart, Newton.

Massachusetts School for the Feeble-minded at Waltham (opened 1848) — *Concluded.*

Trustees appointed by the corporation: Frank G. Wheatley, M.D., North Abington, president; Charles Francis Adams, 2d, Concord, vice-president; Charles E. Ware, Fitchburg, secretary; Frederick P. Fish, Brookline; Joseph B. Warner, Boston; Francis H. Dewey, Worcester.

Quarterly meeting, second Thursday of October, January, April and July.

Superintendent and treasurer, Walter E. Fernald, M.D.

Assistant physicians, Anna M. Wallace, M.D., Edith Woodill, M.D., Jonathan H. Ranney, M.D., L. Maude Warren, M.D., C. Stanley Raymond, M.D.

Visiting days, for the parents or friends of the patients, every day; for the general public, every day, except Sunday.

Staff meetings, daily, at 9 A.M.

Location, near Clematis Brook station (Fitchburg Division, Boston & Maine); about one mile from Waverley station (Fitchburg Division and Southern Division, Boston & Maine).

Wrentham State School (opened 1907): —

Post office and railroad station, Wrentham.

Trustees: Albert L. Harwood, Newton, chairman; Ellerton James, Milton, secretary; Patrick J. Lynch, Beverly; George W. Gay, M.D., Newton; Mrs. Susanna W. Berry, Nahant; Mrs. Mary Stewart Scott, Brookline; Herbert C. Parsons, Boston.

Regular meeting, second Thursday of each month.

Superintendent and treasurer, George L. Wallace, M.D.

Assistant physicians, Franklin H. Perkins, M.D., Arthur R. Pillsbury, M.D.

Visiting allowed every day.

Location, Emerald Street, Wrentham, one mile from railroad station (New York, New Haven & Hartford).

Bridgewater State Hospital (opened 1886, 1895): —

Post office, State Farm; railroad station, Titicut (New York, New Haven & Hartford).

Trustees: trustees of State Infirmary and State Farm.

Medical director, Ernest B. Emerson, M.D.

BRIDGEWATER STATE HOSPITAL (opened 1886, 1895) — *Concluded.*

Assistant physicians, John H. Weller, M.D., Lonnie O. Farrar, M.D., Wilmarth Y. Seymour, M.D.

Visiting days, for relatives or friends of patients, every day; for the general public, every day, with the exception of Sundays and holidays.

Staff meetings, usually daily, at 11 A.M.

Location, one-quarter mile from railroad station.

MENTAL WARDS, STATE INFIRMARY (opened 1866): —

Post office, Tewksbury; railroad stations, Baldwin (Western Division, Boston & Maine), Tewksbury Junction and Salem Junction (Southern Division, Boston & Maine).

Trustees: John B. Tivnan, Salem, chairman; Mrs. Nellie E. Talbot, Brookline, secretary; Leonard Huntress, M.D., Lowell; Galen L. Stone, Brookline; Francis W. Anthony, M.D., Haverhill; Dennis D. Sullivan, Middleborough; Mrs. Mary E. Cogan, Stoneham.

Regular meeting, usually during last week of month, alternately at State Infirmary and State Farm.

Superintendent, John H. Nichols, M.D.

Assistant superintendent and physician, George A. Peirce, M.D.

Assistant physicians, Alfred J. Roach, M.D., Sherman Perry, M.D., Harry R. Coburn, M.D., Earl C. Willoughby, M.D., George McLeod Waldie, M.D., John C. Lindsay, M.D., Charles W. DeWolf, M.D., Hattie E. Chalmers, M.D., Marie Strom Lindsay, M.D., Charles L. Trickey, M.D., William T. Hanson, M.D., Jeremiah J. Paglia, M.D.

Dentist, Frederick E. Twitchell, M.D.

Oculist, Thomas H. Odeneal, M.D.

Pathologist, Rudolf Kohn, M.D.

Internes, William H. Ayler, M.D., Holland G. Hambleton, M.D., Charles M. Armstrong, M.D.

Visiting days, every day from 10 A.M. to 4 P.M.

Staff meetings, daily, at 8 A.M.

Location, about one-half mile from railroad and from electric cars. Coach from infirmary meets almost every train.

PRIVATE.

McLEAN HOSPITAL (opened 1818): —

Department of Massachusetts General Hospital Corporation.

Post office and railroad station, Waverley (Boston & Maine).

President, Henry P. Walcott, M.D., Boston; treasurer, C. H. W. Foster, Needham; secretary, John A. Blanchard, Boston.

Trustees appointed by the Governor: David P. Kimball, Boston; Charles P. Greenough, Boston; Joseph H. O'Neil, Boston; Mrs. Mabel Hunt Slater, Boston.

Trustees appointed by the corporation: Henry P. Walcott, M.D., Boston; Francis H. Appleton, Boston; Nathaniel T. Kidder, Boston; C. H. W. Foster, Needham; John Lowell, Boston; Philip L. Saltonstall, Milton; George Wigglesworth, Boston; Moses Williams, Boston.

Regular meeting, usually at the office of the treasurer, 50 State Street, Boston, on Fridays at intervals of two weeks, beginning sixteen days after the first Wednesday in February.

Superintendent, George T. Tuttle, M.D.

First assistant physician, Frederic H. Packard, M.D.

Second assistant physician, Theodore A. Hoch, M.D.

Assistant physician, Ray L. Whitney, M.D.

Assistant physician and pathologist, E. Stanley Abbott, M.D.

Assistant in pathological psychology, F. Lyman Wells, Ph.D.

Junior assistant physicians, Clifford G. Rounsefell, M.D., Sydney V. Kibby, M.D., Walter J. Otis, M.D.

Visiting days, week days.

Staff meetings, regularly, Tuesdays, at 8.30 A.M.; irregularly on other days, at the same hour.

Location, Pleasant Street, one-third mile from railroad station.

BOURNEWOOD, Henry R. Stedman, M.D., South Street, Brookline. Railroad station, Bellevue (Dedham Division, New York, New Haven & Hartford). Fifteen minutes' walk. Carriage by previous arrangement.

CHANNING SANITARIUM, Walter Channing, M.D., 701 Chestnut Hill Avenue, Brookline. Railroad station, Reservoir (Boston & Albany). Carriage. Or Chestnut Hill street car to Chestnut Hill Avenue.

PINE TERRACE, W. F. Robie, M.D., Baldwinville (Fitchburg Division, Boston & Maine). Three minutes' walk from station.

HERBERT HALL HOSPITAL, Walter C. Haviland, M.D., Salisbury Street, Worcester. Salisbury Street electric car from City Hall Square.

NEWTON SANATORIUM, N. Emmons Paine, M.D., West Newton. Carriage. Or Newton Boulevard street car to Washington Street.

WELLESLEY NERVINE, Edward H. Wiswall, M.D., Washington Street, Wellesley.

LOCUST GROVE SANITARIUM, Miss Alice R. Cooke, Sandwich; medical director, George E. White, M.D. Carriage.

FRAMINGHAM NERVINE, Ellen L. Keith, M.D., Winter Street, Framingham.

SHERWOOD, J. F. Edgerly, M.D., Lincoln. About two miles from railroad station.

HIGHLAND HALL, Samuel L. Eaton, M.D., 340 Lake Avenue, Newton Highlands.

DR. REEVES' NERVINE, Harriet E. Reeves, M.D., 283 Vinton Street, Melrose Highlands.

PRIVATE HOSPITAL, William J. Vivian, M.D., East Walpole (Wrentham Branch, New York, New Haven & Hartford, or Norwood Central trains and electrics).

WHEELER SANITARIUM, Mrs. Maria H. Paul, 32 Copeland Street, Roxbury. Elevated to Dudley Street; Warren Street car.

ARLINGTON HEALTH RESORT, Arthur H. Ring, M.D., Arlington Heights. Carriage.

PRIVATE HOSPITAL, Edward B. Lane, M.D., Wellesley. Address, 419 Boylston Street, Boston.

ELM HILL PRIVATE SCHOOL AND HOME FOR THE FEEBLE-MINDED, George A. Brown, M.D., Barre (Southern Division, Boston & Maine).

PRIVATE HOSPITAL, H. N. Archibald, M.D. Post office, Cheshire (Boston & Albany to Pittsfield or North Adams). Electrics to Cheshire.

PRIVATE HOSPITAL FOR MENTAL DISEASES, Edward Mellus, M.D., 419 Waverley Avenue, Newton. Carriage. Or Commonwealth Avenue car to Grant Avenue.

GLENSIDE, Mabel D. Ordway, M.D., 6 Parley Vale, Jamaica Plain.

TERRACE HOME SCHOOL, Miss F. J. Herrick, Amherst (Central Massachusetts Branch, Boston & Maine). Carriage.

FISK HOSPITAL, 106 Sewall Avenue, Brookline. General manager, Chas. D. B. Fisk.

KNOLLWOOD, Earle E. Bessey, M.D., corner Beacon Street and Waban Avenue, Waban (Boston & Albany).

PRIVATE HOSPITAL, Sara E. Stevens, M.D., 31 Linnet Street, West Roxbury (New York, New Haven & Hartford).

BELLEVUE SANITARIUM, Mary W. L. Johnson, M.D., 45 Wolcott Road, Brookline.

PRIVATE HOSPITAL, Arthur C. Doten, M.D., 46 Roxbury Street, Worcester.

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